

"IN FER IT."

Looks that way. How do you like it?
 If the soup makes you sick what will the dinner be?
 "Good old D-m-cr-t-c Times once more!"
 Gilt edged bonds go begging.
 Even Tennessee has to pay 5½ per cent. for money.
 Good preferred stocks on a 10 per cent. basis.
 Mills everywhere laying off hands.
 Tramps begin to infest country roads.
 Hey, Louisiana, how do YOU like it?
 Hey, New England, how do YOU like it?
 Hey, "New Industries," down South, how do YOU like it?
 Hey, Old Ham Slicer, how do YOU like it?
 These "Good Old D-m-cr-t-c Times once more."
 Let everybody sing

Oh, they found things all a Boomin'
 And they'll put "things" on the Bum
 But we'll "Hook 'er to the Biler"—
 Let the Tariff "freedom" come.

They are going to set the manufacturers (and their merry men) "free" so the President has said.

Over there is a bunch of the "freemen," advance guard of the army, lining Main Street curb waiting for a job. Some more of them are up the Lancaster Pike mending roads.

Oh, you "Good Old Dimmycratic Toimes!"

But we go right along making these wonderful elevators for the man who understands.

And so can afford to drop into patriotism and sass the enemy when every smart body who is making improvements

"Hooks 'er to the Biler"

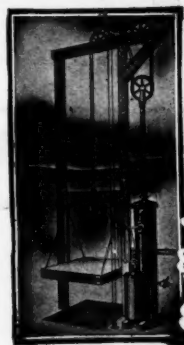
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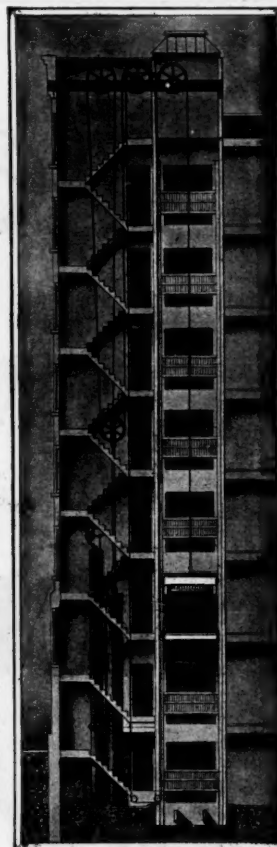


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OFFICIAL ORGAN OF THE AMERICAN MEAT PACKERS' ASSOCIATION

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No. 17.

HIGH PRICES FOR LIVE BEEF.

Good cattle sold for 9¾ cents a pound on the hoof at East St. Louis on Wednesday, the highest price on record at that market for this time of year. And yet livestock interests complain that they do not get a living price for their beef animals and cannot afford to raise them.

FRESH BEEF IMPORTS.

Fresh beef imports during the past week included 1,763 quarters of beef landed at New York from the steamship Cedric, and 200 quarters from the Arabic at Boston. This was chilled Argentine beef brought in via Liverpool. It was originally intended for the British market, and was cut for that market, but was transhipped to the United States to take advantage of higher markets here. Some frozen beef, both from South America and Australia, also reached here via Europe.

FOREIGN MEAT IN LONDON.

Almost the whole of the foreign supply of beef imported into the United Kingdom is now derived from Argentina and Australia, reports Deputy Consul General Carl R. Loop, whereas in 1908 the quantity of fresh and refrigerated beef received from the United States was 162,000,000 pounds; in 1912 it dwindled to 685,000 pounds, and this quantity was distributed throughout the United Kingdom. In consequence there is no quotation for American beef (that is, from the United States) recorded in the weekly wholesale market reports, nor has there been during the year.

The following were the prices during the week ended September 24, 1913, for imported beef in London per hundredweight of 112 pounds: Argentine frozen, hind quarters, \$9.08; fore quarters, \$6.53; chilled, hind quarters, \$11.92; fore quarters, \$7.66; Australian frozen, hind quarters, \$9.08; fore quarters, \$6.53.

In the Central Meat Market, London, on September 29, foreign beef realized the following prices per hundredweight: Argentine chilled, hind quarters, \$9.65 to \$11.92; fore quarters, \$6.53 to \$7.38; River Plate, frozen, hind quarters, \$9.08 to \$9.36; fore quarters, \$7.10 to \$7.38; Australian frozen, hind quarters, \$9.08 to \$9.36; fore quarters, \$7.38. The retail prices to consumers vary slightly in different districts in London. A fair average per pound in cents is: Sirloin, 19; wing rib, 18; silver side, 16 and 17; steaks, 24 to 28. This is mostly frozen meat, which American consumers would hesitate to accept.

TESTING OUR MARKET WITH ARGENTINE BEEF Experimental Shipments Being Made by Many Concerns

Removal of the tariff on foreign meats has resulted in a general movement on the part of meat interests here and abroad to test the United States market with South American beef, and to a lesser extent with Australian beef. There has been a general rush to get Argentine beef onto the markets of the Atlantic seaboard as soon as possible, both to test the taste of the public for foreign beef and to take advantage of the high markets here, which afford opportunity for profit on the duty-free Argentine beef.

How this trade will work out remains to be seen. Some trade authorities believe South America will be able to provide sufficient beef to satisfy the demands of both European and United States markets. A larger number are of the opinion that this will not be possible, at least for many years, and that the result of competition between Europe and the United States will be to maintain prices of this imported beef and limit the supply on any one market.

At first there promises to be a plentiful supply of Argentine beef in Eastern markets within reach of the Atlantic seaboard. That is, as much as limited refrigeration space on ocean steamships will permit. High United States markets at this time look tempting to those who have Argentine beef to ship, and they have bought up all the steamship space for months ahead and will fill it with Argentine beef for the United States.

Both American and Foreign Packers Are Shipping.

This applies both to big American packers who have establishments in the River Plate country, and to English and native packing concerns which kill in Argentina and heretofore have sent their beef to European markets. Talk of big American packers "monopolizing" the steamer space so as to control the market is believed only by those outside the trade. As a matter of fact the so-called "independent" Argentine packing concerns have engaged steamer space for months ahead, and are in a position to put on the United States market as much of their beef as they care to send and as the limited ocean refrigeration facilities will allow.

The result of this rush to reap the early fruits of free trade is already apparent in the London market, where Argentine beef is higher by at least 2 cents a pound than it was previously. This is because the diversion of expected British supplies to the

United States has limited the market and so raised the price. In New York Argentine chilled beef is selling at from 1½ to 3 cents a pound under like domestic native beef, at wholesale.

The volume of this imported beef is so small compared to the amount of domestic beef marketed, however, that there is little or no apparent effect on retail prices. United States cattle interests are not alarmed over the prospect of this competition with their product, since they believe it will be impossible to put enough foreign beef on our markets to seriously weaken the value of the domestic product.

It is evident also that this imported beef will find a market only close to the seaboard points where it is imported, since railroad freight charges would render its shipment to the interior unprofitable, and in its chilled condition it would not stand too much handling after leaving the ship's coolers.

It must be remembered that the import beef here referred to is chilled beef, not the frozen article. The trade is almost unanimous in the belief that frozen beef will never be accepted by the American consumer, because of its poor appearance and shrinkage in cooking. Frozen beef could be imported in larger volume and at less expense than chilled beef, but the trade hesitates to accept it except for certain hotel and restaurant uses, and the chilled product will largely take its place.

Up to date at least 70 per cent. of the foreign beef brought in has been frozen beef, and only 30 per cent. chilled. This is about the proportion on the British market also, but the chilled product is slowly replacing the frozen beef, although European consumers are more willing to take the frozen stuff than are Americans.

Beef Not Cut to Suit Local Trade.

Two of the big packers landed several thousand quarters of Argentine beef at New York within the past ten days, and report that it has given good satisfaction. It did not find as ready a sale as it might because of its having been cut for the British market, with three ribs on the hind quarter, whereas New York demands but one rib on the hind. This beef was not received direct, but came via Liverpool. It is understood that hereafter beef coming direct, both that shipped by American packers and by British and Argentine concerns, will be cut according to

the requirements of our own market here.

Refrigeration space on the direct steamship lines is being increased, and vessels are being diverted from European trade, so that within the next few months a much larger tonnage of South American beef is expected on the United States market at Atlantic seaboard points. Trade authorities are largely of the opinion, however, that the volume of imports will not be permanently large enough to supply our home demands to such an extent as to cause a marked reduction in prices.

In this connection it is interesting to read what James M. Pickens, of the U. S. Department of Agriculture, has to say on the meat situation. In the official bulletin of the Department, issued last week, reference to which was made in the last issue of The National Provisioner, Mr. Pickens says:

Government View of the Meat Situation.

"The high cost of meat is a serious reality, and it is now obvious that the rise in prices in recent years is the natural result of an actual shortage in production. This condition is reflected in the per capita consumption of meat in the United States, which is estimated to have fallen off 10 pounds in 4 years, or from 102 pounds in 1909 to 152 pounds in the fiscal year 1913. These figures are exclusive of lard. It is evident that the country is facing an era of short production of meat, and that some constructive means must be adopted if the American appetite for this class of food is to be supplied.

"The decline in beef production is especially marked. This is shown in three different ways—by the number of cattle on hand, the number received at market centers, and the number slaughtered. A decrease in market receipts and in the slaughter, with a corresponding increase in the number remaining in the country, would not be alarming; but when, with a diminishing slaughter, we are depleting our stock of cattle, there can be no doubt of the gravity of the situation.

"In the last six years the number of beef cattle in the country has apparently fallen off over 30 per cent, while the population has of course increased. According to estimates of the Bureau of Statistics of the Department of Agriculture, the beef cattle in the country on January 1, 1907, numbered 51,566,000, and at the beginning of the present year the number was only 36,030,000. Meanwhile the number of dairy cows has remained practically stationary.

"The receipts of cattle at six of the principal livestock markets (Chicago, Kansas City, Omaha, St. Louis, St. Joseph and Sioux City) for the first nine months of 1913, as reported in market journals, were very slightly in excess of the receipts for the same period of 1912, but in comparison with 1911 there was a decrease of nearly 10 per cent.

Beef Slaughters Have Steadily Decreased.

"The slaughter of beef under Government inspection, which covers more than half of the total slaughter of the country, shows a steady falling off since 1910, the total decline amounting to over 800,000 carcasses, equivalent to about 450 million pounds of dressed beef. Applying the ratio of Federally inspected slaughter to total slaughter according to the census figures for 1909, this means a falling off of 1,419,000 cattle, or ap-

proximately 780 million pounds of beef, in the entire slaughter of the country from 1910 to 1913.

"The following table shows the inspected slaughter in detail for the past four years. Sheep show a steady increase, as do hogs for a portion of the period, but the quantity of meat furnished by these smaller animals is of course relatively less than that from cattle.

Animals slaughtered under Federal inspection, fiscal years 1910 to 1913:

	Cattle.	Calves.	Swine.	Sheep.	Goats.
1910..	7,962,189	2,295,099	27,656,021	11,149,937	115,811
1911..	7,781,030	2,219,908	29,916,363	13,005,502	54,145
1912..	7,532,005	2,242,929	34,906,378	14,208,724	63,983
1913..	7,155,816	2,068,484	32,287,538	14,724,465	56,556

Year ended June 30.

"With our diminished production in the face of the heavy demand and high prices of the home market we no longer have a surplus for export, and it is no wonder that our export trade in meat animals and products has declined heavily. Our once great trade with England in cattle and fresh beef has vanished, and the only considerable items now shipped to foreign markets are prepared hog products, such as bacon, hams, and lard. From 1904 to 1906 our exports of live cattle approximated 600,000 head annually. For the last fiscal year (1913) they numbered only 24,714, about one-tenth of which went to Great Britain.

"Up to the present year our meat imports have been so negligible that they were not separately listed in the commerce returns: Shipment of beef have recently been received from Australia on the one coast and from Argentina on the other. For years an unimportant number of cattle of the class known as "stockers" have come from Canada and Mexico.

Cannot Rely on Beef Imports.

"While future imports may afford some measure of relief, too much reliance should not be placed upon this source of supply. A study of the statistical situation in other countries does not disclose where we are likely to obtain any large quantity of beef for an extended period. Besides our nearest neighbors, Canada and Mexico, the sources of imports are practically limited to South America (especially Argentina) and Australia. New Zealand exports large quantities of mutton but very little beef. Canada and Mexico do not at present give promise of substantial assistance.

"The number of beef cattle in Canada is only about one-ninth of that in the United States, and shows a steady decrease amounting to over 11 per cent. in the last 5 years. Recently thousands of cattle have been brought in from Canada, mainly because of poor pasturage and partial failure of the hay crop there. This movement may continue for a time, but it will naturally have the effect of further reducing Canada's stock of cattle.

"The unsettled conditions in Mexico make it unlikely that any considerable number of cattle can be expected from that country for at least a few years. Argentina and Australia are already supplying most of the British imports, and have been called upon to make up the loss in the supply formerly furnished by the United States. The Australian colonies, however, are sheep rather than cattle countries, and export probably four times as much mutton and lamb (by weight) as beef.

"Argentina is a large producer and exporter of beef, but has apparently reached the limit of its present cattle resources. The number of cattle in that country showed a decrease at the last census (1911) as compared with the preceding one (1908). The report from Buenos Aires that 7,262,000 cattle were killed in 1912 out of a total stock of 29,000,000 indicates that Argentina is drawing on its reserve.

Europe Will Take All Export Beef.

"It appears that England alone could probably take all of the foreign beef available for export, to say nothing of the new markets which have already been formed in other European countries. We shall therefore have to bid against England and other purchasers of foreign beef, and this competition will tend to keep up prices. It must be remembered, too, that this foreign beef is not up to the standard of quality of our corn-fed beef.

"In view of the present meat situation at home and abroad, it is unlikely that our cattle raisers will have much to fear from foreign beef."

WAYS TO RELIEVE FOOD SHORTAGE.

Discussion of the problem of our meat supply shortage has been widespread ever since the recent convention of the American Meat Packers' Association at Chicago, when the subject was so prominently brought to the attention of the trade and of the country. Since that time there have been many views expressed and many plans suggested. One of the most interested listeners to the convention talks was F. W. Niebling, of Cincinnati, the refrigerating machinery expert. Mr. Niebling has long been associated with the trade, and is much interested in its problems. Writing of these matters after the convention, he said:

"We have all listened to many arguments relative to the shortage of meats, and what is being used and has been used from the various animals, and most of us have formed some sort of opinion, some based on actual experience, while others are based on ideas gained through conversing and reading.

"The writer was born and raised on a farm, and feels qualified to express some convictions which have come to him through this experience. Being of the good old-fashioned German parentage, he was made to work and earn his way in the world at a very tender age, and as he was always a big, strapping fellow, he naturally had the burden of the hardest and most difficult work. This was thirty-six years ago.

"We killed various kinds of animals on our place, and did not throw away a thing; in fact, we were taught that waste was little short of crime. We would kill four or five animals a day, cure hams and shoulders, render lard, make headcheese, blood pudding, pork sausage and liver pudding, and the balance would go toward fertilizer.

"The work was hard, but the memories are dear, and the lessons taught in our youth follow us through varied experiences; so the man of experience and hard work is the fortunate one.

"Farming, however, was not my calling. I was of a mechanical turn of mind, and while still young devoted most of my time to machine shop and work of that character, until I finally got to the ice machine, so that my first experience allied very well with my real calling.

"As we ride through the country to our great cities of progress, and find sickness and

(Continued on page 20.)

MELVIN THINKS WELL OF ARGENTINE BEEF

Federal Meat Inspection Chief Returns From South America

Dr. A. D. Melvin, chief of the Bureau of Animal Industry of the U. S. Department of Agriculture, and head of the federal meat inspection service, returned last week from his inspection trip to the beef-producing countries of South America. He speaks very favorably of Argentine beef conditions, and believes that country will be able to supply the world with increasing quantities of beef.

Whether enough can be exported to take care of both European and United States demands he is not prepared to say. That is for the future to determine, he says. The possibilities are there, but developments must determine the volume and the price. He speaks highly of Argentine veterinary and meat inspection methods, and does not anticipate trouble with Argentine meat brought into this country.

Incidentally, Dr. Melvin denied emphatically the reports that he intended to resign from the Federal service to accept a South American offer. "I never had any such intention or offer," said he, "and the first I knew of it was when I read of it in the newspapers." Dr. Melvin has resumed his former place as head of his Bureau, and is again actively in charge of all meat inspection affairs.

Likes the South American Beef.

Dr. Melvin says the quality of Argentine beef is good. "It is fine beef," said he. "There is no question about that. Most of the cattle are Durhams and they are well handled on foot and in the abattoirs.

"Of course, the only federal regulations there concern the exported meat, for the slaughtering is done largely in municipal slaughterhouses. South America certainly has a fine system of abattoirs. The inspection laws are based largely on ours, and the South American beef will measure up to American demands.

"The Argentine government is taking a deep interest in the beef industry now. It has as fine a laboratory equipment as could be found anywhere. As to the farms themselves, they would make many American ranches look slovenly in comparison.

"Much of the cattle country is fenced, even in the far outlying regions. The fences are both high and heavy, and are expensive to make. The posts have to be imported from the north, where there is a semi-tropical country with much wood. But once the fences are built, they will last almost indefinitely. They have to be heavy, for I have never seen better beef cattle anywhere.

"The ranches have been breeding for years and have produced some fine strains. I should say, roughly, there are about 29,000,000 head in the country, and as the population is only about 7,000,000, this leaves a good margin for export. They have been shipping a good deal of frozen meat to England and some to Italy, but are now getting more into chilled meat."

Visited Other South American Countries.

Dr. Melvin's trip included Argentina, Uruguay and Brazil. In Argentina he inspected all of the establishments preparing beef for export with the exception of one which was not operating at the time, and visited several

large ranches. He also attended the stock shows at Rosario and Palermo, where many very fine animals were exhibited. In Uruguay he visited one of the two large establishments, the other not being in operation. In Brazil he visited Sao Paulo and Rio de Janeiro, where a fine municipal abattoir has recently been completed, at which all of the slaughtering for that city is done. From Sao Paulo he went into the interior country.

Argentina and Uruguay are large exporters of beef and mutton, for which Great Britain is their principal customer. Brazil, however, exports no refrigerated beef, although it supplies Central America and Cuba with a considerable quantity of cured beef known as "tasajo," or "jerked beef."

While statistics show that Argentina is already slaughtering up to the limit of its present stock of cattle, Dr. Melvin was impressed with the great resources of that country for cattle raising and believes that it will be possible for the stock raisers to bring about a large increase in the meat output if present prices are maintained.

The cattle slaughtered for export in Argentina, Dr. Melvin says, are fed no grain whatever, but are raised and fattened entirely on alfalfa pastures. For the most part the cattle are high-grade stock, the predominating breed being the Durham, with the Hereford ranking second and the Polled Angus third in number. The alfalfa pastures are capable of supporting many more cattle than are the native "camps," or unbroken country. In a general way the cattle raisers estimate on 2½ acres of pasture per head for growing cattle, and 3 to 3½ acres for fattening cattle. These pastures support the cattle the year round without any further feeding except in occasional times of drought or invasion of locusts.

Alfalfa, he says, is not being grown nearly as extensively as it could be. The extension of its growth he thinks will depend very largely upon the prices that the cattle raisers receive for their cattle. Because of present satisfactory prices the tendency now is to convert the grain lands into alfalfa pastures. As cattle raising is a much more certain enterprise than grain growing, the people prefer to raise cattle when the prices are remunerative.

Cattle Values in the Argentine.

"At the time of my visit," says Dr. Melvin, "cattle that dressed 820 pounds were sold for \$74.80 gold. This grade of Argentine beef, which is of very high quality, is selling in England for from 8 to 9 cents a pound wholesale. Besides the price received for the meat, there is a considerably return American trade these by-products are being from the hide and the offal, and since the entrance of American packers into the South carefully prepared and utilized.

"A very high quality of mutton is also produced in the Argentine, but at the time of my visits shipments were scarce on account of the floods which were quite prevalent in sections of the province of Buenos Aires and farther south.

"Argentina for many years has been importing the best breeding cattle and sheep from Great Britain, and today has some of

the finest types in the world. Uruguay has a good grade of livestock, but they are not equal to the cattle in the alfalfa region of Argentina."

ANGLO-ARGENTINE MEAT MEN HERE.

British meat men who have interests in Argentina are taking great interest in the United States market since the removal of the tariff on meats. Thomas Nelson, of the Nelson steamship and Argentine meat interests, spent several weeks in the United States just recently, investigating our market conditions. P. J. Poels and H. T. Miller, directors of the Smithfield & Argentine Meat Company, and A. J. Poels, son of the former, arrived in New York on the Olympic on Tuesday, and will spend some time in this country and Canada looking into meat and livestock conditions.

P. J. Poels is one of the well-known figures of the great Smithfield Market, London, where he is familiarly known as "Uncle John." He is a veteran meat dealer, and numbered among his acquaintances some of the pioneers in the United States trade. He is a director of the London Meat Trades Journal, and is actively interested in other phases of the meat industry of Great Britain.

MEAT EXPORTS FOR NINE MONTHS.

Preliminary government reports of exports of meat and dairy products for September show an increase in value of exports of about half a million dollars as compared to September, 1912. For the nine months ending with September export values were about \$8,000,000 greater than for a like period of 1912. These increases were in values of bacon, hams and lard. Exports of beef, oleo oil, neutral lard, etc., showed a decrease. Tallow exports were less in volume, but greater in value.

A comparison of export figures for September follows:

	September	
	1912.	1913.
Cattle, head	213	442
Cattle, value	\$16,494	\$43,844
Beef, fresh, lbs.	821,093	635,289
Beef, fresh, value	\$101,465	\$74,309
Beef, pickled, etc., lbs.	2,187,832	1,851,159
Beef, pickled, etc., value	\$193,012	\$185,279
Bacon, lbs.	14,978,365	16,328,592
Bacon, value	\$1,874,545	\$2,138,530
Hams and shoulders, lbs.	9,165,871	12,238,411
Hams and shoulders, value	\$1,254,822	\$1,782,377
Pork, pickled, etc., lbs.	4,047,404	4,549,954
Pork, pickled, etc., value	\$407,588	\$506,703
Lard, lbs.	41,828,723	36,880,357
Lard, value	\$4,666,354	\$4,188,817
Tallow, lbs.	2,018,576	1,147,412
Tallow, value	\$122,793	\$73,680
Oleo oil, lbs.	5,238,927	7,823,159
Oleo oil, value	\$644,628	\$875,869
Neutral lard, lbs.	4,201,612	2,126,486
Neutral lard, value	\$480,375	\$243,530

For the nine months the comparison is as follows:

	Nine months	
	1912.	1913.
Cattle, head	31,806	5,549
Cattle, value	\$2,982,838	\$240,437
Beef, fresh, lbs.	7,561,261	5,358,634
Beef, fresh, value	\$855,394	\$623,901
Beef, pickled, etc., lbs.	21,701,482	18,994,607
Beef, pickled, etc., value	\$1,794,065	\$1,905,067
Bacon, lbs.	145,410,894	155,495,102
Bacon, value	\$17,576,183	\$20,334,091
Hams and shoulders, lbs.	140,436,704	129,658,009
Hams and shoulders, value	\$17,382,057	\$18,187,998
Pork, pickled, etc., lbs.	33,885,104	32,664,063
Pork, pickled, etc., value	\$3,285,156	\$3,517,219
Lard, lbs.	361,894,080	380,136,329
Lard, value	\$37,026,248	\$42,980,259
Tallow, lbs.	23,034,772	22,683,745
Tallow, value	\$1,418,087	\$1,465,752
Oleo oil, lbs.	80,361,361	80,111,210
Oleo oil, value	\$9,222,921	\$9,080,063
Neutral lard, lbs.	48,270,643	32,985,182
Neutral lard, value	\$5,300,999	\$3,773,023

Watch page 48 for business opportunities which may be just what you want.

PRACTICAL POINTS FOR THE TRADE

[EDITOR'S NOTE.—Nothing but actual, bona fide inquiries are answered on this page of "Practical Points for the Trade." The National Provisioner uses no "made-up" queries, with answers taken out of old, out-of-date books. The effort is made to take up and investigate each question as it comes in, and to answer it as thoroughly as time and space will permit, with a view to the special need of that particular inquirer. It must be remembered that the answering of these questions takes time, and that the space is necessarily limited, and inquirers must not grow impatient if the publication of answers is delayed somewhat. It should also be remembered that packing-house practice is constantly changing and improving, and that experts seldom agree, so that there is always room for honest difference of opinion. Readers are invited to criticize what appears here, as well as to ask questions.]

SCOTCH OR BEEF SAUSAGE.

A New England subscriber asks this question:

Please give me a recipe for making good beef sausage or Scotch style sausage.

There are several kinds of Scotch style sausage, such as haggis, white and black puddings, beef and pork sausage, etc., and different ways of making them.

Some make "haggis" as follows: The heart, tongue and about half the liver of a sheep are chopped fine, to which is added about half the weight of the above of chopped cured unsmoked bacon and three well-beaten eggs, and the whole thoroughly amalgamated and seasoned with salt, pepper and the pulverized rind of a lemon. The mass is stuffed into a well-cleaned hog or sheep stomach, or sometimes in a linen bag, and boiled slowly about two hours.

White pudding is made of 60 per cent. of beef suet, with the fibre totally eliminated and chopped into small pieces and mixed with 40 per cent. of oatmeal finely ground. The whole is seasoned with pepper and salt, stuffed into beef rounds and boiled at about 185 degs. Fahr. for 30 minutes, then cooled off thoroughly before being handled much. Care must be taken to stuff rather loosely, otherwise the oatmeal in cooking will burst the skins. Some use Scotch groats, which is oats shelled and cleaned, instead of oatmeal, but the latter is best.

Black pudding is made of chilled leaf lard cut into half-inch cubes, Scotch groats (whole oats shelled) which should be boiled prior to mixing for about half an hour, and fresh pig's blood—about one third of each of the whole. Mix thoroughly and stuff in

beef rounds. Cook about 30 minutes at around 185 degs. Fahr. Do not stuff too tight, as the groats expand in cooking. Season with salt, black pepper, allspice, coriander and marjoram.

A good beef sausage is made of lean beef and suet chopped fine and stuffed in wide hog casings or beef rounds. Seasoning per 100 lbs.; 2 to 2½ lbs. salt, ½ lb. white pepper, ¼ lb. allspice and 3 ozs. well-rubbed sage. A little pork mixed with the beef make a nicer-flavored sausage.

FORES VS. HINDS OF BEEF.

The purchasing officer of a big Western college which feeds its own students writes as follows:

Editor The National Provisioner:

In feeding our thousand students our beef bill is naturally heavy. We would like to ask this bit of information. We can buy forequarters at about three cents lower than the entire carcass. What is the difference in actual weight of bones in forequarters and hindquarters? In other words, would the three cents saved be more than offset in the weight of the bones?

The number of big heavy bones in a forequarter of beef is so much more, and the weight is so much more than the bones in a hindquarter of beef, that the hindquarter at three cents a pound additional price is cheaper when there are a number of people to feed.

In a full cut forequarter of beef there are thirteen big, heavy ribs, running clear across the quarter. These ribs are joined at both ends. The joints are heavy. On the one side in particular there is a chine bone running the full length of the quarter, which is attached to the backbone where the spinal cord runs, which is also very heavy. The neck bones are very big and heavy. The shoulder and front shin bone is also thick and heavy. Aside from the first eight ribs, which is the only prime part of the forequarter, and is used for roast beef, the balance of the forequarter is used for soup meat, for corned, stews and pot roasts only, so that the only prime part of the forequarter of beef is the first few ribs.

The hindquarter usually runs from 5 to 10

pounds less than the forequarter, while the thigh and shin bone runs through the round. That is all the waste on the round of beef, which is half of the hindquarter. After the one thigh bone is removed it is a solid piece of beef with absolutely no waste. The other half of the hindquarter is the choicest part of the animal, where are found the top sirloin or butt, a solid piece of from 12 to 18 pounds, with no waste, used for steaks, roasts and pot roasts; the hip, from which the choicest sirloin steaks are cut, and the short loin, from which the tenderloin and porterhouse steaks come. While there is some bone in sirloin and porterhouse steaks (which part is called the short loin), there is not a fraction of the bone in it that there is in the forequarter.

The suet in the hindquarter is worth as much as the beef itself. The kidney is also valuable, so it can be readily seen that for your purposes the hindquarter is much cheaper at a price three cents a pound higher than that asked for the forequarter.

FROZEN PORK AND BEEF LOINS.

A small packer asks for the following information:

Editor The National Provisioner:

Please give us some information concerning the handling of frozen pork loins and beef "tenders."

Pork loins should be "pulled" with an even covering of fat, about half an inch in thickness. Be careful not to "score" the loins. They are usually packed in averages 7 to 11 pounds inclusive, and over 11 to 13 pounds inclusive. They should be placed in the freezer for 48 hours, at 6 to 10 degs. below zero, and stored at 12 degs. above. Refrigerator cars should be not over 32 degs. Fahr. when loaded with loins or butts. Butts which are to be frozen and stored the same as pork loins are usually packed in boxes of 50 pounds net. Loins should be wrapped in muslin when packed.

Hanging "tenders" should be from good cattle only, no "canner" tenderloins to be included. Trim the rough ends and pack flat in boxes lined with cloth, at 20 pounds per box. Freeze for 48 hours at 6 degs. below zero, and store at 12 degs. above.

STANDARD FOR A GENERATION SWENSON EVAPORATORS

have been put into every industry where evaporators are used. They have become so well and so favorably known that for most of these industries today the Swenson is standard. Repeat orders have followed one another until now half of our business is based upon previous business with the same concerns. At the same time, where required, we will design and construct evaporators of any type to suit special conditions.

We have become the largest manufacturers of evaporators in the United States because we have gone at the thing from the right standpoint. Our staff of engineers includes men whose experience ranges over all industries using evaporators, and whose training has been along thoroughly scientific lines. Every evaporator we build is designed to fulfill certain specific conditions. It is designed with the background of this wealth of experience, and is based upon correct principles. Only

under such conditions could the business have been built up to our present dimensions.

The reason the big packers come back to us for more and more evaporators for tank water is because they have thoroughly tested out our product and found it satisfactory. The man whose plant is smaller does not always have opportunity to make these tests, but he can safely rely upon the example of the men of widest experience.

SWENSON EVAPORATOR CO.

945 Monadnock Block

(Formerly American Foundry & Machinery Co.)

CHICAGO

THE NATIONAL PROVISIONER

New York and
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Official Organ American Meat Packers'
Association.

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DAMAGE TO HOG MEATS

In connection with the problem of con-
serving our meat supplies so much attention
has been centered on the beef question that
pork has been somewhat overlooked. Our
hog supplies are a vital factor in this prob-
lem of getting meat enough to eat. They are
important because they are capable of such
rapid increase as compared to beef, and they
are important because they are liable to such
heavy inroads through disease.

Hog losses to packers through condemna-
tions for tuberculosis are an old story and a
sore point. Recently hog cholera has threat-
ened as the chief danger to our hog crop.

Its ravages have been noticeable in lessened
hog marketing, and even more seriously in
the sacrifice of breeding stock by farmers
fearful of the plague and anxious to get out
of the business. Fortunately there is hope
of checking this loss through the use of the
new hog cholera serum. Otherwise we would
be in a bad way—and the world with us—for
pork.

But in the use of this serum, eagerly seized
upon the hog raisers as a means of salvation
from disaster, abuses have developed which
threaten to cause serious damage if not
checked. In a memorial to the American
Veterinary Medical Association the United
States Livestock Sanitary Association calls
attention to the serious damage to portions
of hog carcasses through the use of this hog
cholera serum in the hands of unskilled
persons.

It is stated that improper serum, dirty
syringes and general unsanitary conditions
where the farmer or his help try to treat
the hogs themselves, instead of leaving it to
a skilled veterinarian, have resulted and will
result in serious damage and loss. Attention
is called to the danger of forming abscesses
in hams which are not discoverable until the
ham is sliced for use.

It is believed that the ham is not the
proper area for inoculation. Experiments
are being made to determine the best meth-
ods. Meanwhile experts believe that the use
of this serum by farmers and incompetent
laymen should be discouraged as far as
possible.

The meat trade is interested in this mat-
ter, as this loss falls solely upon the meat
man. The farmer inoculates the hogs, sells
them to the packer, and the damage is not
discovered until later. It is a variation of
the long-standing abuse under which the
packer pays meat prices for cattle and hogs
later condemned as tuberculous. In the case
of this hog cholera serum steps should be
taken which would prevent damage to hog
meats such as has been indicated.

FOOD SANITATION

For many years we have been hearing,
through the newspapers, magazines and even
in works of fiction, of the reprehensible hab-
its of the meat trade, and we are still hear-
ing of them—whenever a space-writer, lec-
turer or office-seeker has a purse to replenish
or an axe to grind. One would think the
meat industry the worst-supervised and the
most out-of-date of all, instead of being, as
it is, the most modern and the most strictly
regulated.

It might be enough to ask the critics
where there is a food industry anywhere near
approaching the meat packing trade in the
efficiency of its organization and operation,
or the rigor of government supervision over

it. There could be but one answer: There is
none. But let us look at the matter in a
comparative light. While the critics have
been in full cry after the meat plants, what
has happened in places where meats and all
manner of foods are prepared for eating?

Take the modern, palatial, strictly-man-
aged city hotel, for example. Here every-
thing should be and is supposed to be per-
fect. Do the sensationalists ever "muckrake"
the hotel kitchens? Not that anybody has
noticed. But in a recent issue of The Inter-
national, a hotel workers' paper which con-
sumers do not see, is an amazing description
of conditions in the kitchens of the finest
hotels in the country.

Temperatures in these kitchens rise as high
as 140 degrees. Nearly all are in basements
or sub-basements. Fifty or more men work
in a room cleaning fowls, hashing meat, par-
ing vegetables, kneading dough, mixing
sauces, and they work in a constant rush.
The infernal heat drives them to drink quart
after quart of water, and they perspire "into
your soup, into your bread or cake, on your
steak, your fish, your cream—on everything
which is served you, dear, squeamish reader!"

Here is another pretty picture:

"To wipe their hands and mop their brows
the cooks are given two towels a day. But
then . . .

"Did you order hashed brown potatoes?
They will reach you shaped in a neat little
mound. Your omelette will have an almost
mathematically perfect contour. How is this
done? The cook takes one of his two sweat-
soaked towels, lays it over the potatoes or
the omelette and pats the dish deftly into
the required shape!"

These men are not all cleanly or healthy
or careful in their personal habits. In many
hotels they are compelled to dress and un-
dress in the kitchen or the bakery; dressing
rooms are few, and bathing facilities un-
known! Jackets are changed but once or
twice a week.

These are but the merest outlines of the
picture presented of conditions in the finest
hotel kitchens of the country. Compare
them with the picture of the various depart-
ments of the modern packinghouse, with its
sanitary perfection, its day-and-night gov-
ernment inspection, its medical supervision
of the health and habits of employees, its
tiled and glazed walls and floors, its shower
baths and steel clothes lockers and rest
rooms, its daily laundering of uniforms, and
even its daily manicuring of workers' finger
nails.

And yet the consuming public, taught to
shudder whenever a meat plant is mentioned,
walks happily into the gilded hotel restau-
rant and eats what is set before it without
a qualm. And the press goes on grilling the
meat industry.

TRADE GLEANINGS

The E. O. Painter Fertilizer Company will establish a branch plant at Plant City, Fla.

The City Commissioners of Huntsville, Ala., have authorized the erection of an abattoir.

The city of Austin, Tex., contemplates voting on \$25,000 bonds for the erection of an abattoir.

Swift & Company has purchased a site at Shreveport, La., on which to erect a fertilizer plant.

J. Walter Hosur contemplates organizing a company at Suffolk, Va., to establish a cottonseed oil plant.

The Lange Soap Company, San Antonio, Tex., has increased its capital stock from \$100,000 to \$175,000.

The Riverside Cotton Oil Company, Fort Worth, Tex., has increased its capital stock from \$50,000 to \$75,000.

The hide, tallow and wool plant of the Thorntons, Ltd., at Brantford, Ont., has been gutted by fire. The loss is \$65,000.

The Old Guano Company, Richmond, Va., has been incorporated with a capital stock of \$25,000. W. E. Barrett is president.

The new packing plant of the Tampa Packing Company at Tampa, Fla., is nearing completion and will shortly be put in operation.

The Master Butchers' Association of Grand Rapids, Mich., are contemplating organizing a company to erect a rendering plant and abattoir.

The New York Butchers' Calfskin Association, 407 East Forty-seventh street, New York City, N. Y., are having alterations made to their warehouse.

Duff's Odorless Fertilizer Company, Los Angeles, Cal., has been incorporated with a capital stock of \$50,000 by C. H. Henry, L. T. Pitts, T. J. Rich and others.

The Jefferson Cotton Oil and Fertilizer Company, Jefferson, Tex., has increased its capital stock from \$50,000 to \$75,000 to provide for the fertilizing plant now being erected.

The Daley Manufacturing Company, St. Louis, Mo., has been incorporated with a capital stock of \$6,000 by M. H., David A. and Jos. H. Kelly. The company will manufacture soap.

The J. T. Meader Company, Boston, Mass., has been incorporated with a capital stock of \$35,000 to deal in hides and skins. J. T. Meader, S. H. Abbott and H. A. Perry are the incorporators.

The Holz & Hess Meat Market, Charleston, W. Va., has been incorporated with a capital stock of \$15,000 by J. L. Hess, T. Wegman, L. L. Hess and others. The company will operate meat market, abattoir and cold storage plant.

An improvement to the extent of nearly doubling the capacity of the Major Bros.

Packing Company at South Bend, Ind., may result if the petition presented the Board of Public Works is granted. The concern makes the privilege of placing a sidetrack from the Lake Shore and Michigan Southern Railway Company right-of-way on their property to their plant between Cleveland and Logan streets, on 19 lots owned by the packing company to the plant. The construction of this track will probably mean several new buildings on the packing site as a much-needed cold storage plant will be built. The concern is sending its product to Indianapolis for storage, and this is an extra heavy expense.

REMEDIES FOR THE FOOD SHORTAGE.

(Concluded from page 16.)

hunger through meat famines, etc., and note the millions of acres of land which might be cultivated, and supply all of the deficiency, and bring good, wholesome food into our markets, we sigh over the abandonment of the farms. But how many ever give a thought to the fact that there are ways and means of utilizing this land?

"I have given this a great deal of thought, and I believe the government could start many small farms along the railroads, rivers

with the requisites to stock these farms, and let them produce eggs, butter, milk and garden truck. Have an automobile gather them up every day, and deliver to a central power and cold storage plant, where the milk, butter, etc., may be properly treated and shipped into the city by our suburban railways.

"There would always be plenty of skimmed milk returned for the hogs that they would raise, and they could also raise material for the cattle to graze on. These products shipped into the city, and known to be fresh, would bring a good price.

"I believe there is enough land within fifty miles of all our cities to raise sufficient animals to supply the deficiency in our meat supply. Besides giving people work and preventing famines, this would greatly increase the value of the land.

"The cold storage and power plant, centrally located in each colony, could be used for many purposes—electric power for plowing and operating all of their farming implements, as well as sawing, cutting, etc. And in the cold storage part of it they could make ice to supply the tenants.

"I have in mind an idea to make an iron form for these tenant houses, and build them on the line, two combined, fitted with 1-inch insulation cork on the inside, so as to make them absolutely dry and sanitary. The barns and various outbuildings could be built out of the lumber cut from this land, after it is all sawed and worked up properly.

"There would, of course, be a superintendent over each section, and he should be a thoroughly practical and efficient man. The tenants would be paid for their products in proportion to the quality, so there would be an incentive always to improve.

"In sections where they were not handy to schools, there should be schools supplied so as to give the youngsters the advantage of a practical schooling, with opportunity to develop any mechanical instincts.

"I believe that a great many of the young class of men and boys have abandoned the farms because their parents gave them no privileges, and the glimpse of the blue clothes, brass buttons and bell-cord have lured them to the city. With these schools, however, and an extra horse for the boy, I believe more would be content, and satisfied to produce food for the brain-racked, fagged-out city people.

"With education, they would develop a liking for reading and writing, and finally have newspapers of their own, and keep alive to what is going on in other parts of the country, and acquainted with prevailing prices.

"The government could make tests and be able to tell just what the plants were doing in each section, and there would be a system inaugurated showing the cost of various things.

"I believe that our soldiers should be given more work, and a chance to make more money; they should have shops in which to work and improve themselves, and enable them to support their families, and if the forts had more land annexed to them, and they could produce, it would make money for the government, help the men to gain in strength, and be of service to the community right along. Idleness in too many cases has made our soldiers a menace to the country."



F. W. NIEBLING.

and creeks. Take the convicts from the workhouses and penitentiaries, where they are becoming worse all the time, and put them on this land to grade it, root up the old trees and straighten it up, and make good roads to get to these farms.

"Lay out from five to ten-acre truck farms, and rent to the poor people. Furnish them

Improved System of Rendering.
4 Machines in 1.
More Profits—Less Expense.
Ask for Catalog A. Cost Low.

THE LIESINGER COMPANY, Inc.
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PACKERS who buy our SPECIAL HAM PAPER for smoked meat wrapping and Lard Liners, get the GREATEST VALUE the market offers.

WRITE US FOR PLAIN OR PRINTED SAMPLES

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THE ORIGINAL AND WELL KNOWN

WANNENWETSCH SYSTEM

SANITARY RENDERING AND DRYING APPARATUS

Manufactured by

C. H. A. WANNENWETSCH & CO., BUFFALO, N. Y., U. S. A.

Write for Catalogue

FOR PURCHASING DEPARTMENTS

OVER A MILE OF ROOFING.

Some interesting figures appear in the contracts issued in connection with the construction of the new Michigan Central Terminal at Detroit. One of these items is for 200,000 square feet of J-M Built-Up Asbestos Roofing, involving five carloads of material, to be used for railroad sheds alone. If placed end to end these sheds would extend over a mile.

The contract for this roofing was given to the Detroit branch of the H. W. Johns-Manville Company, the well-known manufacturers of asbestos products, who are also furnishing the waterproofing, J-M Vitribestos smoke stacks lining, 2,000 feet of J-M sectional conduit, and 16,000 lineal feet of J-M asbestoel pipe covering for plumbing, heating and power lines throughout the building.

"BEAUTY" FIXTURES PRAISED.

The artistic and beautiful equipping of first-class meat markets by the Cincinnati Butchers' Supply Company, Cincinnati, O., is bringing these well-known manufacturers a good deal of work from those that want something above the average. Messrs. Kahn & Haas, owners of the City Market, Gadsden, Ala., write the Cincinnati Butchers' Supply Company about their new market outfit just installed:

Gadsden, Ala., October 10, 1913.
The Cincinnati Butchers' Supply Co.,
Cincinnati, Ohio.

Gentlemen:—We are highly pleased with the "Beauty" refrigerator and fixtures you furnished us. Your Mr. Imhoff, whom you sent to place our fixtures, has done his duty admirably and to our entire satisfaction. We are very proud of the appearance of our place, which is the talk of our town, and hope soon to forward you photo of same.

GREATER VALUE OF MOTOR TRUCKS.

In a survey of conditions in the motor vehicle field President George A. Kissel, of the KisselKar Company, says among other things: "As for commercial trucks, there is no question in my mind that this year will show the greatest strides in the history of

that industry. The truck campaign is just passing out of the educational stage. Trucks have proved themselves in actual service tests covering a period of years and business men, formerly skeptical, seem now to be thoroughly convinced that to keep up with competitors they must adopt motor delivery.

"In addition to this, experienced and reliable truck drivers are constantly multiplying, thus obviating a formerly bothersome problem. Gradually, also, improved loading and unloading methods are being adopted to keep trucks moving and thus up to their maximum possibilities. Trucks handled rightly are such an obvious economy over horses, in both time and money, that there is no question regarding their ultimate domination in local and interurban delivery."

YORK ICE MACHINE SALES.

The York Manufacturing Company, York, Pa., reports the following installations of refrigerating machinery since its last report:

Rathskeller Cafe, Seattle, Wash.; one 11-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete.

Intermittent Vacuum Precooling Company, New York, N. Y.; one 17-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete.

Harbisons Dairy, Massey, Md.; one 8-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete.

Clark Hotel (F. M. Demmick, Prop.), Los Angeles, Cal.; one 6-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete.

The Hargus Cafe, New York, N. Y.; one 4-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete.

Lion Oyster House, Seattle, Wash.; one 2-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete.

Alaska Gastineau Mining Company, Juneau, Alaska; one 2-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete.

Herman Scheele, Ft. Wayne, Ind.; one 4-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete.

Reuger Hotel, Inc., Richmond, Va.; one 6-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete.

Wadley & Company, Terre Haute, Ind.; one 20-ton horizontal double-acting belt-driven refrigerating machine and high pressure side complete, also a brine cooler and 3,250 feet of 2-inch direct expansion piping for storage rooms.

Mainland Ice & Cold Storage Company, Ltd., Vancouver, B. C., Can.; one 90-ton vertical single-acting chain-driven refrigerating machine with high pressure side complete, using flooded ammonia condensers, also one 50-ton flooded freezing system complete.

Ebner Ice & Cold Storage Company, Vincennes, Ind.; one 100-ton absorption refrigerating machine complete.

Anderson Independent Fish Company, Cincinnati, O.; one 11-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete. This installation was made by John Bouchard & Sons Company, Nashville, Tenn.

Carn, DeVore & Dupree, Reddick, Fla.; one 11-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete, also a 5-ton freezing system and direct expansion piping for beef chill and storage rooms.

Yource Hotel, Shreveport, La.; one 11-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete, also a shell and tube brine cooler, having 150 sq. ft. of effective surface.

Iowa Machine Works, Clinton, Ia. (for U. S. Dredge Water Way, Clinton, Ia.); two 2-ton vertical single-acting steam-driven enclosed type refrigerating machines and high pressure sides complete, also two 500-lb. freezing systems.

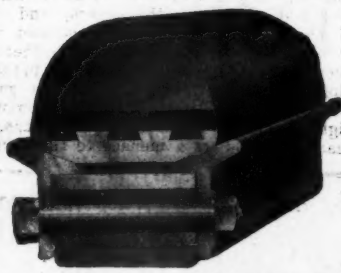
Jefferson Supply Company, Aultman, Pa.; one 4-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete.

Swift & Company, Chicago, Ill.; a 1-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete. This installation was made in Dallas, Tex.

Phillip Keefer, Nanticoke, Pa.; one 6-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete.

Livingston Apartments, Atlanta, Ga.; one 2-ton vertical single-acting belt-driven enclosed type refrigerating machine and high pressure side complete.

Moore & Sames, Cuero, Tex.; 1,100 feet of 1 1/4-inch direct expansion piping.



Is \$25.00 Worth of Time Worth Saving?

UNITED STATES STANDARD MOTOR TRUCK TIRES

(DEMOUNTABLE)

will undoubtedly save you at least \$25.00 worth of time whenever you are compelled to make a tire replacement.

They do not necessitate laying up your trucks for hours and days at a time while your wheel is away at some distant repair shop for tire replacement.

A United States Tire can be changed by your own driver in your own garage in fifteen minutes' time. Furthermore, they are absolutely

GUARANTEED FOR 10,000 MILES OF SERVICE

(CONDITIONAL UPON THIS MILEAGE BEING USED WITHIN ONE YEAR'S TIME)

UNITED STATES TIRE COMPANY, New York

ICE AND REFRIGERATION

NEW CORPORATIONS.

Sterling, Ill.—The Sterling Dairy Company has been incorporated with a capital stock of \$50,000 by C. Fey, A. Hey and Ira Hey.

Broadwater, Va.—A. L. Doughty Fish and Cold Storage Company has been incorporated with a capital stock of \$50,000 by A. L. Doughty and others.

Paterson, N. J.—The Spring Water Ice Company has been incorporated with a capital stock of \$25,000 by J. Silberman, M. Potash and D. Cohn.

Bloomington, Ill.—The Agle Artificial Ice Company has been incorporated by G. B. Agle, C. F. J. Agle and E. B. Hawk. The capital stock is \$100,000.

Checotah, Okla.—The Checotah Jersey Creamery Company has been incorporated with a capital stock of \$10,000 by C. J. Munn, B. F. Lafayette and others.

Clendenin, W. Va.—The Clendenin Ice and Cold Storage Company has been organized with a capital stock of \$20,000 by S. Jarrett, J. H. Davis and others. A 20-ton ice and cold storage plant will be erected.

Naperville, Ill.—The Naperville Consumers Company has been incorporated with a capital stock of \$25,000 to manufacture ice and operate cold storage plant. S. Mather, J. P. Rickert and J. F. Royce are the incorporators.

ICE NOTES.

Shubuta, Miss.—T. M. Spinks contemplates erecting a 5-ton ice plant.

Clarksdale, Miss.—The burned plant of the Holland Ice Company will be rebuilt.

Fulton, Mo.—A 5 to 10-ton ice plant will be erected by the McIntire Ice Company.

Plaquemine, La.—The Dunlap Electric Company contemplates building an ice plant.

De Soto, Mo.—The ice plant of the De Soto Dairy Ice and Fuel Company will be enlarged.

Sanderson, Tex.—A 5-ton ice plant will be erected by the Sanderson Electric Light Company.

Mullins, S. C.—It is reported that the Mullins Lumber Company will install an ice plant.

Cassville, Mo.—A. L. Galloway and F. Chaney contemplate erecting a 5-ton ice plant.

Holden, Mo.—Thos. Halsey and others are organizing a company to establish a 15-ton ice plant.

Clarksburg, W. Va.—The Imperial Ice Cream Company of Parkersburg will erect a plant here.

Mt. Sterling, Ky.—A company is being organized by D. N. Young and others to establish a 20-ton ice plant.

Hartford, Conn.—Swift & Company will install a cold storage system in their branch house at Hartford, Conn.

Kansas City, Mo.—The Strong Line, W. B. Strong, manager, will erect a cold storage plant costing around \$10,000.

Bunceton, Mo.—R. F. Wyman and others are organizing a company with \$10,000 capital stock to establish an ice plant.

Welch, W. Va.—The recently incorporated Welch Ice Company has taken over the Welch Ice and Cold Storage Company's plant.

Boyles, Ala.—It is reported that a new ice plant having a capacity of 75 tons and costing around \$75,000 will be erected here.

Charleston, W. Va.—The Diamond Ice and Coal Company will erect a 5,000-ton ice storage house to be refrigerated by the gravity brine system.

Pittsburgh, Pa.—The Consolidated Ice Company of Pittsburgh has declared the usual quarterly dividend of 1½ per cent. on the preferred stock.

Omaha, Neb.—The People's Ice and Cold Storage Company will shortly commence the erection of a \$125,000 cold storage warehouse, one story high, 150 x 100 feet.

New York, N. Y.—The Knickerbocker Ice Company has purchased eight lots at the northeast corner of Amsterdam avenue and 184th street upon which a large ice plant

will be erected in the near future.

McPherson, Kan.—The cold storage plant which was destroyed by fire recently is to be rebuilt. A committee composed of W. J. Krehbiel, T. C. Sawyer and V. F. Roseberg will visit several cities to inspect up-to-date ice plants.

PRESENT STATUS OF THE REFRIGERATING INDUSTRY IN AMERICA.

By S. S. Van Der Vaart, B. S., Editor Ice and Refrigeration, Chicago, Ill.*

In a glance at the present status of the refrigerating industry in America, one is struck at once by two points of salient interest to those engaged in industries utilizing artificial refrigeration. One is the gradual, and during the past few years, rapid extension of the ice manufacturing industry northward into the domain heretofore thought to be the prerogative of natural ice, so that today we find great ice manufacturing establishments being erected in Portland, Maine, Boston, Massachusetts, and in Montreal, Toronto, Winnipeg, Calgary and other cities in Canada.

In New York City, where in 1904 less than 20 per cent. of the total amount of ice consumed was manufactured ice, by 1913 the ice machines furnished practically 65 per cent. of the total amount of ice consumed, and when plants now under construction or planned for erection during the coming winter, are completed, the proportion will be nearer 75 per cent. manufactured to 25 per cent. natural ice. In cities like Dubuque and Sioux City, Iowa and Minneapolis and St. Paul, Minn., where natural ice is abundant, easily obtained and cheap, ice-making plants have been or are being erected. In many cities throughout the north dealers in natural ice are considering the propriety of installing ice factories instead of depending wholly upon the natural product.

*Paper read before the Third International Congress of Refrigeration, Chicago.

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For Natural and Manufactured
ICE PLANTS
Economical—Efficient

Let Us Recommend
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for Your Needs

ICE TOOLS

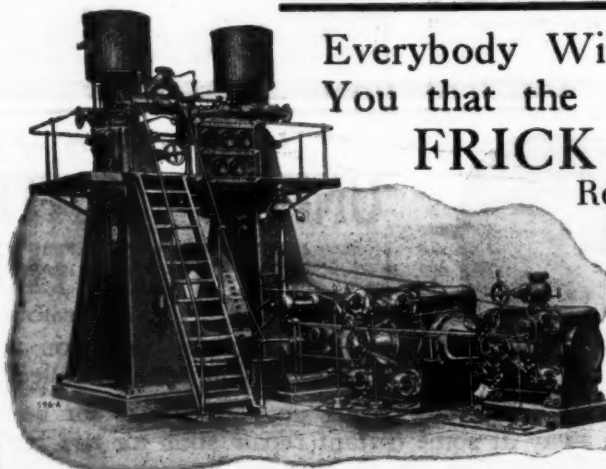
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Large Stock
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Refrigerating
Machine is
the best you
can buy—
everything
considered.
Let us get
better ac-
quainted.

Send for our Catalogue on Refrigeration—It may be our Ammonia Fitting Catalogue is what you need. No matter what you require for refrigeration you can get it quick from

FRICK COMPANY :: Waynesboro, Pa.

PURITY IS ESSENTIAL IN AMMONIA

For nothing will reduce the profits of your plant so surely as Ammonia laden with organic impurities.

BOWER BRAND ANHYDROUS AMMONIA

is made from pure Aqua Ammonia of our own production, thoroughly refined and purified. **Send for Free Book**

HENRY BOWER CHEMICAL MANUFACTURING CO., 29th St. and Gray's Ferry Road, Philadelphia, Pa.

B. B. AMMONIA may be obtained from the following:

ATLANTA: Manufacturers' Warehouse Co.
BALTIMORE: Joseph S. Wernig Transfer Co.
BOSTON: 120 Milk St., Chas. P. Duffee.
BUFFALO: Keystone Transfer Co.
CHICAGO: F. C. Schapper, Westerlin & Campbell Co.
CINCINNATI: The Burger Bros. Co.
CLEVELAND: General Cartage & Storage Co., Henry Bollinger.
DETROIT: Riverside Storage & Cartage Co., Newman Bros., Inc.
DALLAS: Oriental Oil Co.
HAVANA: O. B. Cintias.
INDIANAPOLIS: Railroad Transfer Co.
JACKSONVILLE: St. Elmo W. Acosta.
KANSAS CITY: Crutcher Warehouse Co.
LIVERPOOL: Peter R. McQuile & Son.
LOS ANGELES: United Iron Works.
LOUISVILLE: Union Warehouse, 7th and Magnolia Sts.
MILWAUKEE: Central Warehouse.

MEMPHIS: Patterson Transfer Co.
MEXICO, D. F.: Ernst O. Heinsdorf.
NEWARK: Brewers' & Bottlers' Supply Co.
NEW ORLEANS: Chas. F. Rantz.
NEW YORK: Roessler & Hasselacher Chemical Co., Shipley Construction & Supply Co.
NORFOLK: Nottingham & Wrenn Co.
OKLAHOMA CITY: O. K. Transfer & Storage Co.
PITTSBURGH: Pennsylvania Transfer Co.
PROVIDENCE: Rhode Island Warehouse Co.
ROCHESTER: Shipley Construction & Supply Co.
SALT LAKE CITY: Utah Soap Co.
ST. LOUIS: Pillsbury-Becker Engineering & Supply Co.
ST. PAUL: R. B. Whitacre & Co.
SAN ANTONIO: Oriental Oil Co.
SAN FRANCISCO: United Iron Works.
SAVANNAH: Benton Transfer Co.
SPOKANE: United Iron Works.
SEATTLE: United Iron Works.
TOLEDO: Moreton Truck & Storage Co.
WASHINGTON: Littlefield, Alvord & Co.

The other general outlook to awaken interest is the steady increase in the demand for artificial refrigeration as evidenced by the rapidly increasing output of existing ice machine manufacturing establishments and the starting up of quite a number of new establishments for the manufacture of refrigerating machinery. As the export trade in such machinery is small, the above stated fact is satisfactory evidence that the home field for refrigeration is extending, and this is true not only of the enlargement of the field already exploited but of the opening of new fields, which heretofore were supposed to offer no opportunity for the introduction of refrigerating machinery.

Another instance of interest in the development of the field of refrigeration is the large number of inventions of small refrigerating machines on both the compression and absorption systems, intended primarily for the use of small stores, shops and for household use. These, however, still appear to be in the experimental stage.

New Uses for Refrigerating Machinery.

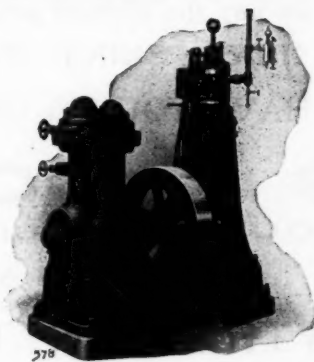
In regard to the opening of new fields for the use of refrigerating machinery, we need but to point out such interesting discoveries as that of the use of refrigerating machinery in the laundry to cool the starched collars and cuffs after leaving the mangle and before they are passed through the shaper. It was found that linens not only preserved their shape much better in winter than in summer but are less liable to become frayed at the edges, in short, would stand more washings in winter than in summer. What was more natural than to create an artificial winter during that part of the laundry operation which proved to be most trying to the goods after the washing. When put to the test of actual service, practice verified theory. Collars and cuffs laundered with the aid of the refrigerating machine proved to be more comfortable for the wearer, presented a smoother surface, did not crack or fray and lasted longer than those laundered in the usual way.

Another instance of new use for refrigerating machinery is found in the mining and metallurgical industries. In the process of treating ores with chlorine gas on a large scale, the recovery and condensation or liquefaction of the chlorine becomes essential. The liquefaction of chlorine gas at atmospheric pressure takes place at -29° F. (-34° C.), and the recent installation of refrigerating plant capable of liquefying 850 pounds of chlorine gas per hour is reported from a Western mining field.

Again it was found that with the aid of refrigeration it is possible to extract gasoline from natural gas. Not all natural gas contains gasoline, but where it does its extraction yields gasoline without incurring cost of manufacture.

In the paper-making industry refrigerating apparatus is being used to some extent—

WATCH PAGE 48 FOR BARGAINS



Refrigerating Machinery

For Retail Meat Markets

The trade is rapidly coming to a realization of the advantages to be gained from the use of MECHANICAL REFRIGERATION in the storing of meats and provisions.

This modern system is more economical, more sanitary, and in every way more satisfactory than the old-fashioned iced refrigerator.

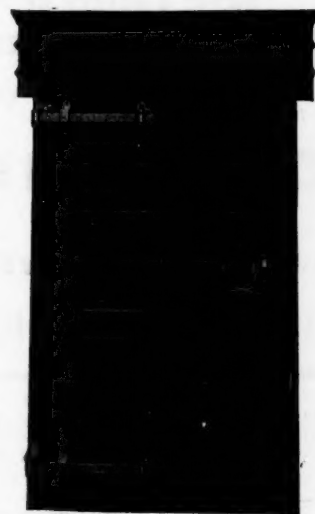
This is "The Progressive Age," but some are progressive without a good excuse. A YORK Refrigerating Plant will put you in the progressive class of wholesale or retail meat dealers without any doubt as to the reason why.

Here is a list of "Progressives" who are using York Apparatus:

H. E. Gault & Son, Marysville, Pa.
F. C. Jones Co., Vancouver, Wash.
Citizens Provision Co., York, Pa.
Coyne Bros., Chicago, Ill.

York Manufacturing Co.
York, Pa.

Branches in all Principal Cities



This is a Contract

We invite users of

Refrigerator Doors and Windows

who are contemplating erection or remodeling plants to write us for

Sample Door and Frame COMPLETE

We will forward it to size required. If it is not satisfactory from every standpoint to YOU in style, workmanship, efficiency and plan, it is YOUR PROPERTY WITHOUT CHARGE or any obligation to us whatever.

(Signed)

Jones Cold Store Door Co.

HAGERSTOWN, MD., U.S.A.

Direct from Producer to Consumer

TANKAGE BONES CRACKLINGS

As we use the above articles in the manufacture of our finished goods, we are constantly in the market for them at top prices. Having no traveling buyer's salary or expense we pay the highest prices for

TALLOW, GREASE, HIDES, SKINS, HAIR, HOOFS, ETC.

WHAT HAVE YOU TO OFFER?

DARLING & COMPANY

FOUNDED 1881

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UNION STOCK YARDS, CHICAGO

BUYERS OF EVERYTHING IN THE OFFAL LINE

at one end in the sulphite mills, where it is used to control temperatures during the treatment of the pulp, and at the other end in such operations as the manufacture of wax paper from plain tissue paper. In this process, the tissue paper is run over rolls, first over a hot roll in melted paraffine and thence over a cold roll, which must be cold enough to prevent the layers of treated paper from sticking together. To secure this and maintain the speed of operation necessary for economical manufacture, cold brine from the refrigerating plant is used in the cold roll.

The use of refrigerating machinery in testing delicate machinery, such as automobile parts, gasoline motors, or complete motor cars, has been tried recently with valuable results. A room is provided where temperatures of zero Fahr. (-18° C.), or below, can be readily maintained, and here the performance of the machine is tested under the equivalent of most severe winter conditions and with different grades and kinds of fuel in order to determine beforehand what par-

ticular combination produces the greatest efficiency.

Extending the Field of Refrigeration.

Regarding the extension of existing fields for use of refrigerating machinery there may be mentioned the use of refrigeration in combating the destructive action of insect pests on fruit trees and vines, especially on such vines as the cantaloupe or melon; thus, e. g., it was found that the aphid or plant louse, which causes so much damage to fruit trees, is the natural food of the common ladybird (Coccinellid), but unfortunately the latter completes its natural life period before the aphid makes its appearance.

The superintendent of the California State Insectary concluded to use the well-known principle of retardation so successfully used with the silk worm, and caused the collection during the fall of several tons of the ladybirds as they were about to hibernate in the forests which they frequent. The ladybirds

(Concluded on page 32.)

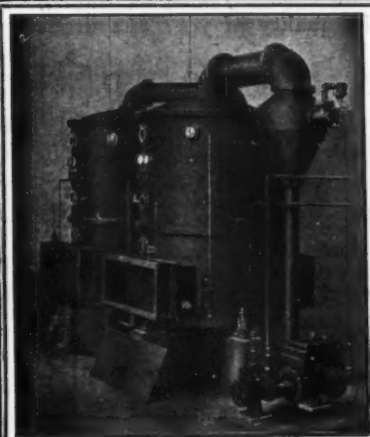
COLD STORAGE INVENTOR DIES.

Charles Tellier, inventor of the modern system of refrigeration, died in abject poverty in Paris this week at the age of 85. His janitor's wife was his only attendant. Money promised for his support by refrigeration interests had never reached him. He died dependent on charity.

REFRIGERATING ENGINEERS TO MEET.

The ninth annual meeting of the American Society of Refrigerating Engineers will be held in the Engineering Societies building, No. 29 West Thirty-ninth street, New York City, on Monday and Tuesday, December 1 and 2, 1913.

Do you read the "Practical Points for the Trade" page every week?



KEEP YOUR EYE ON The Zarembo Patent Evaporator

For TANKWATER and GLUE

Built in all sizes from 100 to 10,000 gallons per hour

We offer, not the excellence of yesterday, but the excellence of today

THE WISE PACKER investigates and buys from
ZAREMBA COMPANY **Buffalo, N. Y.**

(New York Office, 708 Singer Annex)

PROVISIONS AND LARD

WEEKLY REVIEW

All articles under this head are quoted by the barrel, except lard, which is quoted by the hundredweight in tierces, pork and beef by the barrel or tierce and hogs by the hundredweight.

Prices Steady—Trading Quiet—Contract Offerings Limited—Hog Movement Good—Packing of Liberal Volume—Hog Prices Irregular—Quality Complained of—Feed Stuffs Steadier.

There has been no material change in provision values during the past week. Lard has improved slightly, ribs show slight change and pork is slightly lower. The absence of any important development in the news has tended to restrict the offerings of product, while there has not been enough in the daily developments to affect values to any appreciable extent.

The general consensus of opinion seems to be that the position of the market is governed more by the probable supply of hogs than by the question of demand, although that is necessarily a very important factor. While the supply of hogs was not quite so heavy the past week it was still good. The arrivals of pigs are excellent, but the general run of grades is not reported very satisfactory for the needs of the trade. Packers have been fair buyers, and there was also a steady demand from shippers to the east. The receipts of hogs for the week at the principal western points as reported the end of the week was slightly in excess of the corre-

sponding week last year, but also slightly under the previous week.

The movement of hog prices has been a little irregular, although the net change for the week has not been important. Compared with a year ago, hogs are about $\frac{3}{4}$ c. a pound lower, while the price of product shows very little change on ribs and pork, but lard is 1c. a pound under a year ago. The prices for other live stock have ruled fairly steady during the week. Cattle compare with last year's prices, showing maintained values, sheep are slightly higher, and lambs about the same. The following quotations show the comparisons for the week, with the three preceding years:

	Hogs.	Cattle.	Sheep.	Lambs.
This week	\$8.30	\$8.50	\$4.00	\$6.80
Previous week	8.20	8.60	4.55	6.90
Cor. week 1912.....	9.05	8.65	4.20	6.95
Cor. week 1911.....	6.50	7.00	3.55	5.50
Cor. week 1910.....	8.60	6.50	4.05	6.70

From the standpoint of the trade there is a fair interest in a speculative way in the market, and also a fairly maintained interest in the cash trade. With the ready distribution of the hog supply there has been no marked pressure on contracts. The easier tone to the feed stuffs markets early in the week was somewhat of a bearish factor, and had some influence on values, nevertheless,

the development of a considerably better tone in feed stuffs the middle of the week, brought some speculative demand for hog products. After a decline of 8c. to 10c. a bushel in feeding stuffs from the recent high level, a natural recovery was in order, and the feed stuffs markets have been displaying improvement, due in part to less pressure from the country, and this has been followed by a considerable improvement in the demand for cash property.

While a good deal of attention is being directed to the probable supply of Canadian oats and hay to come across the border, and of Argentine corn, still the trade is not looking for a heavy volume of imports sufficient to exert a material influence on values. It may have a steadying tone on the market in preventing violent advances, as any important change in values would be immediately followed by an influx of considerable foreign grain into commercial channels. The trade is also watching with a great deal of interest the influence of the importation of foreign meats, and what effect it will be likely to have upon the American demand, and American values. The importations of Argentine beef so far have not been of important proportions, and the quality has also been below the American quality. These im-



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We guarantee the Armour brand to be pure and dry—free from all foreign substances and non-condensable gases.

In the great Armour plants this brand is used exclusively. Use it in *your* plant and be assured of complete satisfaction and the very highest degree of cold-producing power.

Each drum is tested for purity, dryness and volatility. Sold subject to *your* test before using.

Stocks carried at all principal shipping points. Write for information.

The Armour Ammonia Works

Owned and Operated by **ARMOUR & COMPANY**

CHICAGO, ILL.

portations will, however, supply a certain demand for beef, and correspondingly take the pressure off from the American beef.

Considerable attention is being directed to the relative price of lard compared with last year. With lard prices 1c. a pound under a year ago, and with cottonseed oil 1c. a pound higher than a year ago, the conditions naturally make for increased consumption of western lard compared with compound lard, and before long close observers of the market are inclined to think that such condition will result in the distributing from points of accumulation of the lard supplies which may be pressing on the market.

With the packing season for the summer nearly at an end, the season's supply shows so far an increase of about 900,000 hogs compared with last year. This increase in the supply should normally carry a corresponding increase in the product, but the average weights particularly this fall have been disappointing. During the past week the average weight was 16 pounds under last year, and 12 pounds under two years ago. This will naturally have a decided influence on the total product available. The total packing for the season is likely to reach in the neighborhood of 16½ million hogs. The total number packed has been running considerably in excess of last year, recently, due, it is claimed, to the larger supply of pigs in the receipts, and this is expected to be at the expense of the hog supply later on.

LARD.—There has been a little improvement in values for the week. Demand has been a little better and offerings on the market have been lighter. City steam, 10½c.; Middle West, \$10.10@10.80; Western, \$10.90; refined, Continent, \$11.35; South American, \$11.95; Brazil, kegs, \$12.95; compound lard, 8½@8¾c.

PORK.—Prices are steady, with values showing very little change for the week. Mess is quoted \$23.75@24.25; clear, \$19.75@21.50; family, \$24.50@26.50.

BEEF.—The market is firm but quiet. Trading is not active, but demand keeps about even, with available supplies, and the tone is steady. Quoted: Family, \$19@20; mess, \$17.75@18.75; packet, \$18@19; extra India mess, \$28@30.

SEE PAGE 39 FOR LATER MARKETS.

EXPORTS OF HOG PRODUCTS.

Exports of hog products from New York reported up to Wednesday, October 22, 1913: **BACON.**—Antwerp, Belgium, 112,500 lbs.;

Aarhus, Denmark, 77,700 lbs.; Buenos Aires, A. R., 2,432 lbs.; Bellinzona, Italy, 75,365 lbs.; Caibarien, Cuba, 5,000 lbs.; Colon, Panama, 1,183 lbs.; Cienfuegos, Cuba, 6,000 lbs.; Gibraltar, Spain, 68,082 lbs.; Genoa, Italy, 160,698 lbs.; Glasgow, Scotland, 114,424 lbs.; Guanica, P. R., 1,034 lbs.; Helsingfors, Finland, 26,250 lbs.; Hull, England, 62,428 lbs.; Hamilton, W. I., 1,031 lbs.; Hango, Russia, 50,204 lbs.; Havana, Cuba, 18,980 lbs.; Liverpool, England, 836,844 lbs.; Malta, Island of, 5,049 lbs.; Port au Prince, W. I., 568 lbs.; Rio Janeiro, Brazil, 10,450 lbs.; St. Johns, N. F., 2,740 lbs.; Sagua, Cuba, 28,461 lbs.; Stockholm, Sweden, 38,448 lbs.; Vera Cruz, Mexico, 973 lbs.

HAMS.—Antwerp, Belgium, 29,200 lbs.; Caibarien, Cuba, 10,860 lbs.; Colon, Panama, 5,150 lbs.; Cienfuegos, Cuba, 2,270 lbs.; Glasgow, Scotland, 332,260 lbs.; Hull, England, 202,106 lbs.; Hamilton, W. I., 3,859 lbs.; Havana, Cuba, 29,486 lbs.; La Guaira, Venezuela, 8,224 lbs.; Liverpool, England, 502,504 lbs.; Nassau, W. I., 3,221 lbs.; Progreso, Mexico, 947 lbs.; Port Limon, C. R., 984 lbs.; Port au Prince, W. I., 5,675 lbs.; St. Johns, N. F., 12,615 lbs.; Southampton, England, 56,412 lbs.; Savanilla, Colombia, 517 lbs.; Vera Cruz, Mexico, 1,979 lbs.

LARD.—Antwerp, Belgium, 459,181 lbs.; Algoa Bay, Africa, 49,657 lbs.; Accra, Africa, 1,400 lbs.; Bremen, Germany, 20,000 lbs.; Buenos Aires, A. R., 6,840 lbs.; Cartagena, Venezuela, 16,726 lbs.; Caibarien, Cuba, 3,000 lbs.; Curacao, Leeward Islands, 12,250 lbs.; Cucuta, Colombia, 1,380 lbs.; Cienfuegos, Cuba, 130,646 lbs.; Catania, Sicily, 8,250 lbs.; Drontheim, Norway, 18,900 lbs.; Gibraltar, Spain, 2,750 lbs.; Glasgow, Scotland, 49,940 lbs.; Havana, Cuba, 42,700 lbs.; Havre, France, 64,723 lbs.; Helsingfors, Finland, 13,125 lbs.; Hull, England, 157,250 lbs.; Hamilton, W. I., 2,500 lbs.; Hamburg, Germany, 1,342,396 lbs.; Koenigsberg, Germany, 79,000 lbs.; Kingston, W. I., 5,112 lbs.; La Guaira, Venezuela, 13,751 lbs.; Liverpool, England, 349,997 lbs.; Manchester, England, 214,718 lbs.; Marseilles, France, 15,100 lbs.; Malta, Island of, 14,000 lbs.; Newcastle, England, 39,950 lbs.; Nassau, W. I., 18,832 lbs.; Port Antonio, W. I., 1,800 lbs.; Progreso, Mexico, 5,854 lbs.; Port Limon, C. R., 1,100 lbs.; Port au Prince, W. I., 55,647 lbs.; Riga, Russia, 6,400 lbs.; Rotterdam, Holland, 349,054 lbs.; Sagua, Cuba, 4,870 lbs.; Southampton, England, 143,999 lbs.; Savanilla, Colombia, 3,874 lbs.; Stettin, Germany, 266,860 lbs.; Trieste, Austria, 52,750 lbs.

PORK.—Antwerp, Belgium, 10 tes., 25 bbls.; Aarhus, Denmark, 50 tes.; Buenos Aires, A. R., 25 bbls.; Cartagena, Venezuela, 4 bbls.; Glasgow, Scotland, 75 bbls.; Hamburg, Germany, 5 bbls.; Hamilton, W. I., 8 bbls.; Kingston, W. I., 20 bbls.; Liverpool, England, 130 bbls. 60 tes.; Nassau, W. I., 67

bbls.; Port Antonio, W. I., 63 bbls.; Port au Prince, W. I., 112½ bbls.; Port Antonio, W. I., 5 bbls.; St. Johns, N. F., 391 bbls.

SAUSAGE.—Antwerp, Belgium, 210 pgs.; Buenos Aires, A. R., 4 pa.; Curacao, Leeward Islands, 7 cs.; Sagua, Cuba, 25 pgs.

WHY YOU SHOULD KEEP A FILE.

In connection with the practical trade information published every week on page 18, The National Provisioner is frequently in receipt of letters from subscribers who recall having seen something interesting or important in a previous issue of this publication, but they have mislaid the copy and want the information repeated. The National Provisioner offers the suggestion that if every interested subscriber would keep a file of The National Provisioner he would be able to look up a reference at once on any matter which might come up, and thus avoid delay. A carefully-arranged index of the important items appearing in our columns is published every six months, and with this and a binder, which The National Provisioner will furnish, the back numbers of the papers may be neatly kept and quickly referred to for information.

The binder is new, and is the handiest and most practical yet put on the market, and it costs less than the old binder, too! It is finished in vellum de luxe and leather, with gold lettering, and sells for \$1. It may be had upon application to The National Provisioner, 116 Nassau street, New York.

EXPORTS OF PROVISIONS

Exports of hog products for the week ending October 18, 1913, with comparative tables:

To—	PORK, BBLs.		
	Week ending Oct. 18, 1913.	Week ending Oct. 19, 1912.	From Nov. 1, '12, to Oct. 18, 1913.
United Kingdom...	30	243	15,598
Continent	162	157	11,011
So. & Cen. Am. ...	230	299	18,983
West Indies	920	849	56,255
Br. No. Am. Col.	357	20	15,102
Other countries ..	20	47	
Total	1,342	1,955	117,026

To—	MEATS, LBS.		
	Week ending Oct. 18, 1913.	Week ending Oct. 19, 1912.	From Nov. 1, '12, to Oct. 18, 1913.
United Kingdom...	3,770,725	4,484,425	287,270,740
Continent	466,725	590,325	40,174,250
So. & Cen. Am. ...	54,000	145,225	8,675,950
West Indies	28,000	192,000	9,278,029
Br. No. Am. Col.	600,400	16,500	129,475
Other countries ..	5,600	2,029,325	
Total	4,319,450	5,404,675	344,537,999

To—	LARD, LBS.		
	Week ending Oct. 18, 1913.	Week ending Oct. 19, 1912.	From Nov. 1, '12, to Oct. 18, 1913.
United Kingdom...	4,508,006	4,233,150	256,846,620
Continent	1,834,800	6,072,750	218,119,583
So. & Cen. Am. ...	181,000	649,850	23,595,137
West Indies	549,150	600,400	32,295,060
Br. No. Am. Col.	16,550	16,500	779,604
Other countries ..	80,100	1,575,356	
Total	7,144,956	11,661,809	533,212,020

RECAPITULATION OF THE WEEK'S EXPORTS.

To—	Pork, bbls.			Meats, lbs.			Lard, lbs.		
	Week ending Oct. 18, 1913.	Week ending Oct. 19, 1912.	From Nov. 1, '12, to Oct. 18, 1913.	Week ending Oct. 18, 1913.	Week ending Oct. 19, 1912.	From Nov. 1, '12, to Oct. 18, 1913.	Week ending Oct. 18, 1913.	Week ending Oct. 19, 1912.	From Nov. 1, '12, to Oct. 18, 1913.
New York	192	2,143,350	4,037,956	170,100	362,000		170,100	362,000	
Boston					290,000			290,000	
Philadelphia					704,000			704,000	
New Orleans	1,150	82,000	1,576,000	1,924,000	1,576,000		1,924,000	1,576,000	
Montreal					175,000			175,000	
Quebec									
Total week	1,342	4,319,450	7,144,956	4,319,450	5,404,675	11,661,809	4,319,450	5,404,675	11,661,809
Previous week	1,233	7,242,800	5,534,645	1,233	7,242,800	5,534,645	1,233	7,242,800	5,534,645
Two weeks ago	1,798	5,767,775	7,808,904	1,798	5,767,775	7,808,904	1,798	5,767,775	7,808,904
Cor. week last y'r	1,935	5,404,675	11,661,809	1,935	5,404,675	11,661,809	1,935	5,404,675	11,661,809

COMPARATIVE SUMMARY OF EXPORTS.

From Nov. 1, '12, to Oct. 18, '13.	Same time last year.		Decrease.
	23,405,200	23,051,200	
Pork, lbs.	344,537,999	379,950,331	35,362,332
Meats, lbs.	533,212,020	557,806,178	24,594,158

OCEAN FREIGHTS.

Liverpool.	Glasgow.		Hamburg.
	Per Ton.	Per Ton.	Per 100 lbs.
Beef, per tierces	20/	22/6	33c.
Oil Cakes	15c.	18c.	30c.
Bacon	20/	22/6	33c.
Lard, tierces	20/	22/6	33c.
Cheese	25/	30/	35c.
Canned meats	20/	22/6	33c.
Butter	30/	30/	35c.
Tallow	20/	22/6	33c.
Pork, per barrel	20/	22/6	33c.

EXPORTS SHOWN BY STEAMERS.

Exports of commodities from New York to foreign ports for the week ending Thursday, October 16, 1913, as shown by Williams & Terhune's report, are as follows:

Steamer and Destination.	Oil.		Cottonseed.		Bacon and Hams.		Tallow.		Ref.		Pork.		Lard.	
	Cake.	Oil.	Bags.	Bbls.	Pkgs.	Boxes.	Pkgs.	Pkgs.	Pkgs.	Pkgs.	Pkgs.	Pkgs.	Tcs.	Pkgs.
Lusitania, Liverpool					468					10			750	
Minnehaha, London				350	17								5805	
New York, Southampton					358							25	750	
Kyno, Hull					1085					50			870	3266
Tintoretto, Manchester	643	625										629	600	
Columbia, Glasgow					5121						50	330	850	
Prinz Friedrich Wil., Bremen			30							50				
Snestad, Rotterdam	2781						30							
Ryndam, Rotterdam			160							25			440	4510
Birma, Libau							10							
Bergenfjord, Baltic			10							300			170	
C. F. Tietgen, Baltic			20							125			415	670
Vaderland, Antwerp			698				320			190			240	3100
Niagara, Havre													25	410
Cubana, Havre			6611											
La Savoie, Havre													150	100
Louisiane, Havre										10				
Provincia, Marseilles			896										100	838
Europa, Mediterranean										60				
Kais. Fr. Joseph I, Mediter'ean					437									
Italia, Mediterranean				1814			150				25	40	5200	
Total	11629	3446			7544	110	625	200	3434	26849				

TALLOW, STEARINE, GREASE and SOAP

WEEKLY REVIEW

TALLOW.—The market has been almost entirely without feature during the week, with a tendency toward increased dullness. Dealings have been unimportant in volume, with no change in the list quotations. Some interests have expressed surprise because of the apathy of consumers, but on the other hand their conservative policy in buying has not hurt them, as tallow prices have remained largely stationary for many weeks. Supplies, in the meantime, have not accumulated sufficiently to become burdensome, and the stuff offering seems to be fairly well held. Foreign interest in the market is perfunctory. No further re-sales for foreign account followed those of about a week ago. The London auction sale took place at prices unchanged from a week ago, with 1,338 casks offered of which only 323 were sold. Prime city tallow was quoted at 6½c., and city specials at 67½c.

OLEO STEARINE.—Some sales were made during the last few days on the basis of 8½c.; later, the quotation was advanced to 8¾c. asked. The undertone seems slightly improved as a result of the business that passed, but there was no indication of an important inquiry pending.

SEE PAGE 39 FOR LATER MARKETS.

COCOANUT OIL.—The market is very firm on the spot owing to small supplies. November arrival is quoted fully 1c. per pound under spot values. Ceylon oil is steady, but quiet. Cochín, 13½c.; November arrival, 12½c.; Ceylon, 10% @ 10½c.; shipment, 10½ @ 10% c.

CORN OIL.—Trading is quiet, with the market showing very little change for the week. Prices are quoted at \$6.35 @ 6.50 in car lots.

SOYA BEAN OIL.—The market is nominally firm, but quiet. Offerings continue limited. Spot is quoted at 6% @ 7c.

PALM OIL.—Trading is light, with the demand rather moderate. Buyers are showing limited interest and the demand appears to be of a slow, hand-to-mouth character. Prime red spot, 7@7¼c.; do, to arrive, 6¾c.; Lagos, spot, 7¼c.; to arrive, 7½@7¾c.; palm kernel, 10½ @ 10¾c.; shipment, 10% c.

OLEO OIL.—Trading has again been quiet, with values showing but little change. The

tone is about steady, with values showing but little change for the week. Extras are quoted at New York at 10½c., and 60 florins at Rotterdam.

NEATSFOOT OIL.—The market was firm, with a better demand both for local and export arrival. Prices are firmly held. For 20 cold test, 96@98c.; 30 do., 88c.; 40 do., water white, —; prime, 65@66c.; low grade, off yellow, 62c.

GREASE.—The trading is light, with moderate offerings. Choice greases are firm, and those with low acid test command good prices. Quotations are nominal as follows: Yellow, 5¼ @ 5½c.; bone, 5¼ @ 6c.; house, 5½ @ 5¾c.

EXPORTS OF BEEF PRODUCTS.

Exports of beef products from New York reported up to Wednesday, October 22, 1913:

BEEF.—Antwerp, Belgium, 55 bbls.; Algoa Bay, Africa, 10 bbls.; Belize, Brazil, 15 bbls.; Buenos Aires, A. R., 50 bbls.; Curacao, Leeward Islands, 13 bbls.; Colon, Panama, 50 bbls., 3 tes.; Guanica, P. R., 20 bbls.; Hamburg, Germany, 125 bbls.; Hamilton, W. I., 6 bbls.; Kingston, W. I., 6 bbls.; Liverpool, England, 12 tes.; Nassau, W. I., 39 bbls.; Port Antonio, W. I., 7½ bbls.; Port au Prince, W. I., 42½ bbls.; Port Antonio, W. I., 25 bbls.; Rotterdam, Holland, 25 bbls.; St. Johns, N. F., 435 bbls.; Trieste, Antwerp, 10 bbls.

FRESH MEAT.—Colon, Panama, 185,774 lbs.; Hamilton, W. I., 10,224 lbs.; Liverpool, England, 43,944 lbs.

OLEO OIL.—Glasgow, Scotland, 50 tes.; Hamburg, Germany, 150 tes.; Hamilton, W. I., 100 tes.; Liverpool, England, 160 tes.; Piraeus, Greece, 10 tes.; Rotterdam, Holland, 1,270 tes.; Salonica, Turkey, 25 tes.; St. John, N. F., 50 tes.; Smyrna, Turkey, 82 tes.

OLEOMARGARINE.—Belize, Brazil, 2,675 lbs.; Colon, Panama, 6,000 lbs.; Curacao, Leeward Islands, 1,570 lbs.; Cartagena, Venezuela, 1,350 lbs.; Havana, Cuba, 2,400 lbs.; Hamilton, W. I., 2,180 lbs.; Kingston, W. I., 3,500 lbs.; Nassau, W. I., 1,900 lbs.; Port au Prince, W. I., 4,800 lbs.

TALLOW.—Liverpool, England, 9,049 lbs.; Moscow, Russia, 11,155 lbs.

TONGUE.—Liverpool, England, 165 pa.

CANNED MEAT.—Algoa Bay, Africa, 535 pa.; Batavia, Java, 300 cs.; Colon, Panama, 138 cs.; Curacao, Leeward Islands, 46 pa., 45 cs.; Cartagena, Venezuela, 31 cs.; Delagoa Bay, Africa, 356 pa.; Gibraltar, Spain, 40 cs.; Genoa, Italy, 25 cs.; Glasgow, Scotland, 260 pgs.; Hamilton, W. I., 55 cs.; Liverpool, England, 550 pa., 200 cs.; London, Eng., 460 cs.; La Guaira, Venezuela, 50 pa.; Melbourne, Australia, 214 cs.; Manchester, England, 670 cs.; Savanilla, Colombia, 21 cs.; Southampton, England, 75 cs.

CHICAGO FERTILIZER MARKET.

(Special Report to The National Provisioner from The Davidson Commission Co.)

Chicago, October 22.—The market for animal ammoniates continues very strong and offerings are limited, some of the larger producers being entirely out of the market. Blood has sold freely at \$3 per unit and is firmly held at this price. Regular 11 and 15 tankage has sold up to \$2.85 and 10c. per unit, and is generally held at this price wherever offered; but few of the regular larger producers are willing to sell any considerable quantity at any price just now.

Lower grade tankage is scarce and practically nothing being offered at the moment; \$2.75 and 10c. bid for this and for smaller lots of unground tankage to arrive this or next month. The offerings of low-grade stock from both renderers and small packers are extremely light, and producers have been able to contract their output for the coming year at about the highest prices on record. (Complete quotations on page 37.)

OLEO OIL AND NEUTRAL LARD.

(Special Report to The National Provisioner.)

New York, October 23.—The arrivals of hogs are fairly heavy, but as the average weight is below normal really makes the arrivals for packing purposes only fair sized. The provision market has made little change on account of only moderate demand. The lard market fluctuates within a small circle on account arrivals of hogs expected to continue as they are for a while yet. Oleo oil is very quiet again, and is practically at a standstill, and it is probable that a further concession in price will have to be made to start this article moving again. Neutral lard is quiet with little demand and small stocks. The demand for cottonseed oil from Europe is lacking and they are waiting for lower prices.

FOREIGN COMMERCIAL EXCHANGE.

New York, October 24.—Foreign commercial exchange rates were quoted today as follows:

London—			
Bankers' 90 days.....	4.81	@ 4.8115	
Demand sterling	4.8530	@ 4.8535	
Commercial, sight		@ 4.85%	
Paris—			
Commercial, 90 days....	5.27½	@ 5.27½—1.32	
Commercial, 60 days....	5.25%	@ 5.25%—1.32	
Commercial, sight	5.21%	@ 5.21%—1.16	
Berlin—			
Commercial, 90 days....	93¼	@ 93¼	
Commercial, 60 days....	93%	@ 93 11-16	
Commercial, sight	94½	@ 94 9-16	
Antwerp—			
Commercial, 60 days....	5.29%	@ 5.28%—1.16	
Commercial, sight		@ 5.23%—1.16	
Amsterdam—			
Commercial, 60 days....	39 11-16	@ 39 11-16—1.32	
Commercial, sight		@ 40 1-16—1.32	

Green Olive Oil Foots

SUPERIOR QUALITY

AND ALL OTHER SOAP MATERIALS

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GREEN AND SWEET PICKLED MEATS.

(Special Report to The National Provisioner from the Davidson Commission Co.)

Chicago, October 22.—Quotations on green and sweet pickled meats, f. o. b. Chicago, loose:

Regular Hams—Green, 8@10 lbs. ave., 13@13½¢; 10@12 lbs. ave., 12½@12¾¢; 12@14 lbs. ave., 12¼@12½¢; 14@16 lbs. ave., 12@12¼¢; 18@20 lbs. ave., 12@12¼¢. Sweet pickled, 8@10 lbs. ave., 13¼@14¢; 10@12 lbs. ave., 13½@13¾¢; 12@14 lbs. ave., 13¼¢; 14@16 lbs. ave., 13½¢; 18@20 lbs. ave., 13@13½¢.

Skinless Hams—Green, 14@16 lbs. ave., 13½¢; 16@18 lbs. ave., 13¾¢; 18@20 lbs. ave., 13¼¢; 22@24 lbs. ave., 12¾¢. Sweet pickled, 14@16 lbs. ave., 13½¢; 16@18 lbs. ave., 13¼¢; 18@20 lbs. ave., 13½¢; 22@24 lbs. ave., 13¢.

New York Shoulders—Green, 10@12 lbs. ave., 11½¢. Sweet pickled, 10@12 lbs. ave., 11¢.

Picnic Hams—Green, 5@6 lbs. ave., 9¾¢; 6@8 lbs. ave., 9¼¢; 8@10 lbs. ave., 9¢; 10@12 lbs. ave., 8¾¢. Sweet pickled, 5@6 lbs. ave., 9½@9¾¢; 6@8 lbs. ave., 9¼¢; 8@10 lbs. ave., 8¾@9¢; 10@12 lbs. ave., 8¾¢.

Clear Bellies—Green, 6@8 lbs. ave., 15½¢; 8@10 lbs. ave., 15¢; 10@12 lbs. ave., 14¢; 12@14 lbs. ave., 13¾¢; 14@16 lbs. ave., 13½¢. Sweet pickled, 6@8 lbs. ave., 15½¢; 8@10 lbs. ave., 14½@14¾¢; 10@12 lbs. ave., 13¾¢; 12@14 lbs. ave., 13½¢; 14@16 lbs. ave., 13¼¢.

CHEMICALS AND SOAP SUPPLIES.

(Special Report to The National Provisioner.)

New York, October 23, 1913.—Latest quotations on chemicals and soapmakers' supplies are as follows: 74 or 76 per cent. caustic soda, \$1.55 to \$1.65, basis 60 per cent.; 60 per cent. caustic soda, \$1.80 per 100 lbs.; 98 per cent. powdered caustic soda in bbls., 2½¢. to 2½¢. per lb.; 58 per cent. soda ash, 80¢. per 100 lbs., basis 48 per cent.; 48 per cent. carbonate soda ash, 95¢. per 100 lbs.; talc, 1½¢. to 1¾¢. per lb.; silic, \$15 to \$20 per ton of 2,000 lbs.; marble flour, \$8 per ton of 2,000 lbs.; silicate of soda, 90¢. per 100 lbs.; chloride of lime in casks, 1½¢. and in bbls. 2¢. per lb.; carbonate of potash, 4¢. to 4¾¢. per lb.; electrolytic caustic potash, 4¾¢. to 5¢. per lb.

Prime palm oil in casks, 6¾¢. to 7¢. per lb.; genuine Lagos palm oil in casks, 7½¢. to 7¾¢. per lb.; clarified palm oil in bbls., 7¾¢. per lb.; palm kernel oil in casks, 10½¢. to 10¾¢. per lb.; green olive oil, 76¢. per gal.; yellow olive oil, 83¢. to 86¢. per gal.; green olive oil foots, 7¾¢. to 8¢. per lb.; peanut oil, 65¢. to 75¢. per gal.; Ceylon coconut oil, 10½¢. to 10¾¢. per lb.; Cochin coconut oil, 13½¢. to 14¢. per lb.; cottonseed oil, 7.20¢. to 7.40¢. per lb.; corn oil, 6.35¢. to 6.45¢. per lb.; Soya bean oil, 6¾¢. per lb.

Prime city tallow, 6¾¢. per lb.; house grease, 5¾¢. to 6¢. per lb.; brown grease, 5½¢. to 5¾¢. per lb.; yellow packer's grease, 5¾¢. to 6¢. per lb.

LIVESTOCK AND BEEF EXPORTS.

Exports of livestock and dressed beef from United States and Canadian ports for the week ending October 18, 1913, are reported by Williams & Terhune as follows:

Port.	Cattle.	Sheep.	Beef.
From New York	350	—	—
From Boston	—	—	—
From Philadelphia	—	—	—
From Baltimore	—	—	—
From Montreal	—	—	—
Total	350	—	—
Total last week	153	—	—

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IDEAL HAND CREAM
IDEAL COTTON OIL—15 OZ.
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WHITE WAX—34 OZ.
OIL OF LAVENDER
FLOWERS—12 DROPS
ROSEWATER—74 OZ.
BLUNT TIPPED FINGERS
ARE NEVER PRETTY.
SO WHY NOT TRY TO
MAKE THEM SHAPELY?
BEGIN IT TODAY.

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"COTTONOIL" LOUISVILLE.

COTTONSEED OIL EXPORTS

Exports of cottonseed oil reported for the week ending October 23, 1913, and for the period since September 1, 1913, were as follows:

	Week ending Oct. 23, '13.	Since Sept. 1, '13.
From New York—	Bbls.	Bbls.
Barbados, W. I.	270	—
Bremen, Germany	30	—
Cape Town, Africa	15	139
Christiania, Norway	—	230
Colon, Panama	—	290
Copenhagen, Denmark	120	210
Demerara, British Guiana	—	192
Genoa, Italy	559	629
Glasgow, Scotland	—	555
Hamburg, Germany	30	590
Havana, Cuba	—	49
Hull, England	175	175
Kingston, W. I.	55	197
Liverpool, England	550	1,105
London, England	1,825	2,837
Manchester, England	625	625
Marseilles, France	100	225
Matanzas, Cuba	—	4
Melbourne, Australia	—	14
Monte Cristi, S. D.	—	16
Montevideo, Uruguay	—	62
Naples, Italy	1,814	2,671
Piræus, Greece	61	61
Port Antonio, W. I.	5	56
Port au Prince, W. I.	—	11
Port Limon, C. R.	—	27
Rio Janeiro, Brazil	544	621
Rotterdam, Holland	255	746
San Domingo, S. D.	—	56
San Juan, P. R.	—	44
Santiago, Cuba	—	67
Santos, Brazil	—	100
Sydney, Australia	—	10
Trieste, Austria	700	1,180
Trinidad, W. I.	—	29
Valparaiso, Chile	—	158

Venice, Italy	—	2,116
Vera Cruz, Mexico	—	12
Total	7,402	16,409
From New Orleans—		
Genoa, Italy	—	25
Gothenberg, Sweden	—	100
Havana, Cuba	65	300
Progreso, Mexico	—	200
Rotterdam, Holland	—	400
San Juan, P. R.	—	450
Total	65	1,475
From Baltimore—		
Havre, France	—	400
Total	—	400
From San Francisco—		
Hong Kong, China	—	2
Mexico	—	1
Yokohama, Japan	—	3
Total	—	6
From all other ports—		
Canada	—	124
Mexico (including overland)	—	1,345
Total	—	1,469
Recapitulation—		
From New York	7,402	16,409
From New Orleans	65	1,475
From Baltimore	—	400
From San Francisco	—	6
From all other ports	—	1,469
Total	7,467	19,759

EXPORTS OF COTTONSEED OIL.

Government reports of exports of cottonseed oil for September are given as 6,198 bbls., compared to 30,229 bbls. in September, 1912, a tremendous decrease. Exports for the nine months from January 1, 1913, to September 30, 1913, are reported as 33,179 bbls., compared to 39,102 bbls. for the same period of 1912.

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STEARINES - OILS - TALLOW - GREASE - FERTILIZER MATERIALS

COTTONSEED OIL

WEEKLY REVIEW

THE NATIONAL PROVISIONER is official Organ of the Interstate Cottonseed Crushers' Association, the Texas Cottonseed Crushers' Association, South Carolina Cottonseed Crushers' Association, the Georgia Cottonseed Crushers' Association, and the Mississippi Cottonseed Crushers' Association.

Market Irregular—Pressure in Early-Ship- ment Crude—Consuming Inquiry Fair —Frost Injures Cotton.

At times during the past week the local cottonseed oil market gave evidence of rising, but on these small upturns there was more stuff for sale, and thus the range of quotations was comparatively narrow. News was mixed and not of a character to stimulate speculative operations one way or the other. Much was made of the unfavorable weather conditions in the south, and of a somewhat better consuming demand for cottonseed oil at about these levels, but as an offset, crude came out in moderate volume, and there were expectations of augmented pressure from the south, in the event of any material enhancement of values.

The trade is closely following the lard market, but there was no incentive received from last week's developments. However, the fact that lard prices held reasonably well, in face of an increased and pressing hog movement was very generally discussed. It has been pointed out that lard at this time is more than a cent a pound under the quotation of a year ago, while compound lard prices have also suffered, but the differences between the substitutes and the pure article

is still sufficiently large to insure a liberal consumption of the former. Recently, users of compound lard have been very cautious in taking stuff.

On the whole, the consuming demand for cotton oil lacks feature. The largest interests in the trade are somewhat more enthusiastic over the sales to foreigners, but the outgo in that direction is still disappointing when the light stocks of foreigners, and their reserved absorption to date, are considered. Very little additional information has come to hand concerning the employment of substitutes for cotton oil by European interests, but it has been said that foreigners have utilized other oils on a greater scale than generally supposed, which partly explains their comparative indifference at various periods to our market.

There is no evidence of domestic users of cotton oil being stampeded into buying, and while they themselves do not deny depleted stocks, their confidence is based on the assumption that for several weeks longer, crude mills will be just as anxious to sell as those needing oil will be to buy. At all events, the sensational news sent from the cotton belt recently did not cause much of an expansion in the demand, even though it is realized that (conceding a cotton production somewhat in excess of last year), the available oil supplies for the entire season will prob-

ably be below last year's, because of the absence of an important carry-over on September 1, against a carry-over of approximately 300,000 bales on September 1, 1912.

Many dispatches have come to hand from the southwest telling of inferior quality of seed, due to inclement weather conditions. In the southeast, where the cotton crop is good, the seed question is less of a factor, and normal returns are reported by refiners. The injury caused by the frosts in parts of the central west and the east still remains to be determined, with some estimates placing the damage at over 150,000 bales. However, interests entertaining views of a cotton crop of over fourteen million bales are still in the majority, and it is noteworthy that some of these estimates are from people who are not very bearish on the oil market at present, and who seem to think that ultimately higher prices will be witnessed.

It is not surprising that crude offerings have assumed larger proportions. The season is advancing, with the cotton movement more general, and therefore seed offerings are on an enlarged scale. The ginning report on Saturday should show close to 7,000,000 bales ginned to October 18, against 6,875,000 a year ago. Southern mills are said to have been somewhat more anxious to sell crude for quick shipment than to contract ahead, but no abnormal pressure was indicated by quotations, which ruled from slightly over 42c. to somewhat over 43c. the last several days, according to locality. Just as consumers are looking for liquidation by

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Cottonseed Products.

OIL, LINTERS,
CAKE, ASHES,
MEAL, HULLS.

GOLD MEDALS AWARDED

Chicago, 1893.
San Francisco, 1894.
Atlanta, 1895.
Paris, 1900. Buffalo, 1901.
Charleston, S. C., 1902.
St. Louis, 1904.

crude mills, many in the south are indisposed to grow apprehensive of their own position, knowing that users of oil in general possess only light stocks.

During the week the news came from Washington to the effect that an investigation of conditions surrounding various crude oil mills was about to be inaugurated. It was alleged that certain southern interests were withholding cottonseed and cottonseed oil from the market by agreement, thereby coming in conflict with the Sherman anti-trust law. Locally, the import of the news was minimized. The opinion was expressed that if there was to be an investigation, it would seem hard to convict southern interests for the restraint of trade, even if at certain times they were disposed to keep seed or oil from the market, so long as no unscrupulous methods were resorted to. During the last several weeks there have been reports from Washington having to do with the cotton-oil industry, but many of them have been inconclusive and illogical.

Closing prices, Saturday, October 18, 1913.—Spot, \$6.85@6.97; October, \$6.83@6.88; November, \$6.74@6.75; December, \$6.81@6.82; January, \$6.91@6.92; February, \$6.98@7.02; March, \$7.07@7.09; April, \$7.16@7.19; May, \$7.23@7.27. Futures closed unchanged to 5 decline. Sales were: October, 300, \$6.90@6.88; November, 800, \$6.76@6.74; December, 2,200, \$6.82@6.80; April, 100, \$7.18. Total sales, 3,400 bbls. Good off, \$6.70@6.83; off, \$6.60@6.79; reddish off, \$6.40@6.70; winter, \$7; summer, \$7; prime crude, S. E., \$5.60@5.66; prime crude, Valley, nom.; prime crude, Texas, nom.

Closing prices, Monday, October 20, 1913.—Spot, \$6.95@7.05; October, \$6.97@7; November, \$6.85@6.87; December, \$6.92@6.95; January, \$7.03@7.05; February, \$7.12@7.14; March, \$7.24@7.25; April, \$7.34@7.35; May, \$7.38@7.42. Futures closed 11 to 18 advance. Sales were: October, 3,300, \$7@6.90; November, 500, \$6.83@6.80; December, 3,400, \$6.93@6.86; January, 3,100, \$7.04@6.95; February, 300, \$7.14; March, 5,100, \$7.25@7.15; April, 100, \$7.35; May, 600, \$7.42@7.33. Total sales, 16,000 bbls. Good off, \$6.80@6.95; off, \$6.50@6.90; reddish off, \$6.50@6.70; winter, \$7@8; summer, \$7@8; prime crude, S. E., \$5.66@5.73; prime crude, Valley, nom.; prime crude, Texas, nom.

Closing prices, Tuesday, October 21, 1913.—Spot, \$6.70@7; October, \$6.87@6.90; November, \$6.82@6.85; December, \$6.87@6.89; January, \$6.97@6.99; February, \$7.06@7.08; March, \$7.17@7.19; April, \$7.22@7.27; May, \$7.30@7.32. Futures closed 3 to 12 decline. Sales were: October, 1,100, \$6.96@6.88; November, 1,100, \$6.90@6.83; December, 1,700, \$6.95@6.88; January, 3,100, \$7.06@6.99; February, 800, \$7.17@7.09; March, 3,300, \$7.25@7.18; April, 200, \$7.34@7.30; May, 2,600, \$7.40@7.31. Total sales, 13,900 bbls. Good off, \$6.65@6.85; off, \$6.50@6.80; reddish off, \$6.40@6.70; winter, \$7@8; summer, \$7.20@8; prime crude, S. E., \$5.66@5.73; prime crude, Valley, nom.; prime crude, Texas, nom.

Closing prices, Wednesday, October 22, 1913.—Spot, \$6.85@7.05; October, \$6.92@6.95; November, \$6.83@6.84; December, \$6.92@6.94; January, \$7.02@7.03; February, \$7.09@7.14; March, \$7.22@7.24; April, \$7.30@7.35; May, \$7.38@7.40. Futures closed 1 to 8 advance. Sales were: October, 1,000, \$6.90@6.89; November, 3,900, \$6.84@6.83; December, 700, \$6.92@6.89; January, 1,100, \$6.99@6.97; February, 200, \$7.09@7.08; March, 2,700, \$7.22@7.17; April, 200, \$7.27@7.26; May, 5,000, \$7.39@7.31. Total sales, 14,800 bbls. Good off, \$6.75@6.90; off, \$6.60@6.85; reddish off, \$6.40@6.75; winter, \$7@8; summer, \$7@8; prime crude, S. E., \$5.66@5.73; prime crude, Valley, nom.; prime crude, Texas, nom.

Closing prices, Thursday, October 23, 1913.—Spot, \$6.75@6.95; October, \$6.88@6.90; November, \$6.79@6.80; December, \$6.89@6.90; January, \$7@7.01; February, \$7.08@7.11; March, \$7.19@7.20; April, \$7.25@7.30; May, \$7.37@7.38. Futures closed 1 to 5 decline. Sales were: October, 300, \$6.92@6.88; November, 1,400, \$6.82@6.80; December, 2,100, \$6.90@6.89; January, 700, \$7.01@7; February, 300, \$7.12@7.10; March, 1,300, \$7.20@

7.19; May, 2,100, \$7.38@7.36. Total sales, 8,200 bbls. Good off, \$6.75@6.85; off, \$6.65@6.80; reddish off, \$6.40@6.65; winter, \$7@7.80; summer, \$7@7.80; prime crude, S. E., \$5.66@5.73; prime crude, Valley, nom.; prime crude, Texas, nom.

SEE PAGE 38 FOR LATER MARKETS.

COTTON OIL CABLE MARKETS

Hamburg.

(By Cable to The National Provisioner.)

Hamburg, October 24.—Market firm. Quotations: Choice summer white oil, 72 marks; butter oil, 72½ marks; summer yellow, 67½ marks.

Rotterdam.

(By Cable to The National Provisioner.)

Rotterdam, October 24.—Market firm. Quotations: Summer yellow, 39½ florins; choice summer white, 41½ florins, and butter oil, 41½ florins.

Antwerp.

(By Cable to The National Provisioner.)

Antwerp, October 24.—Market firm. Quotations: Summer yellow, 83 francs.

Marseilles.

(By Cable to The National Provisioner.)

Marseilles, October, 24.—Market easy. Quotations: Prime summer yellow, 84¼ francs; prime winter yellow, 89¼ francs; choice summer white oil, 89 francs.

Liverpool.

(By Cable to The National Provisioner.)

Liverpool, October 24.—Market firm. Quotations: Prime summer yellow, 33½s.; summer yellow, 32¾s.

SOUTHERN MARKETS

Columbia.

(Special Wire to The National Provisioner.)

Columbia, S. C., October 23.—Crude cottonseed oil October, 42½c.; November and December, 43c. bid, with a few sales reported.

Atlanta.

(Special Wire to The National Provisioner.)

Atlanta, Ga., October 23.—Crude cottonseed oil, 43c. for November and December. Meal, \$25, f. o. b. mills. Hulls \$7, Atlanta, loose.

Memphis.

(Special Wire to The National Provisioner.)

Memphis, Tenn., October 23.—Cottonseed oil market steady; prime crude, 44c. Prime 8 per cent. meal, \$27@27.50 per short ton. Hulls, \$6.75@7.

New Orleans.

(Special Wire to The National Provisioner.)

New Orleans, La., October 23.—Crude cottonseed oil easier at 42@42¼c. for basis prime; 43c. for guaranteed prime Texas and Valley; quality poor; offerings numerous. Prime meal, 8 per cent., higher at \$29, short ton, New Orleans; 7½ per cent., \$28. Loose hulls \$8, sacked \$10.50, New Orleans.

Dallas.

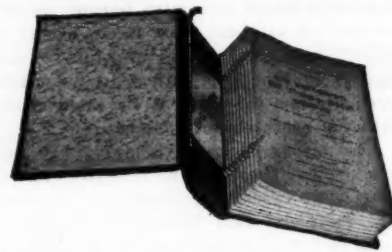
(Special Wire to The National Provisioner.)

Dallas, Tex., October 23.—Cottonseed oil market quiet but steady; 44c. for prime and 41½c. for basis prime; sales light. Choice loose cake, \$28 per short ton, f. o. b. Galveston.

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WHAT COTTON SEED MEANS TO THE FARMER

Why He Should Sell It Instead of Using It at Home

By Dr. A. M. Soule, President Georgia College of Agriculture.

Few by-products of the farm require more earnest consideration at the hands of the producer than cotton seed. The best disposition to make of it is naturally a matter of great concern.

It can, of course, be kept on the farm and utilized after a fashion for feed or fertilizer. Experiments along this line are legion in number. Those which have been made in a careful manner by reputable institutions, however, indicate that the farmer has not been able to secure as large return from his seed when fed directly to livestock or used as fertilizer as he could hope to obtain through their sale and the utilization of the by-products in the furtherance of his farming operations.

The U. S. Department of Agriculture made an extensive series of experiments a few years ago in an effort to determine what should be done with cotton seed. These tests reveal the fact that where 20 bushels of seed was applied with 380 pounds of acid phosphate and 25 pounds of muriate of potash as compared with 300 pounds of meal and an equal amount of phosphate and potash, the result favored the meal by 88 pounds of seed cotton per acre. This would be a difference of at least \$6 per acre in favor of the meal.

Feeding Seed to Animals Is Unsatisfactory.

These experiments were repeated under varying conditions for several years. They were made by men absolutely without bias and with no interest or concern in the outcome, and the difference observed was so marked as to indicate that the wise disposition to make of cotton seed under ordinary circumstances would be to sell them and substitute meal therefor in mixed fertilizers.

The seed when fed directly to livestock are known to be unsatisfactory in many particulars. They contain so much oil that scouring is sometimes induced, and often animals do not eat them as readily as is desirable. Moreover, if they constitute the exclusive concentrate they are likely to produce digestive troubles of more or less permanent character, and certainly they affect the quality of butter obtained from dairy cows in an unfavorable manner, making it very slick, greasy and lacking in aroma and flavor.

In the handling and management of cotton seed the farmer should naturally be actuated only by selfish motives. In other words, he should utilize them so as to secure for himself the largest possible return in a financial way. It has been shown that a ton of average meal, say, containing 6.18 per cent. of nitrogen, is more effective for fertilizer purposes than two tons of seed.

All will appreciate that a ton of meal may be bought for much less than two tons of seed. This being true, the farmer should naturally sell or exchange his seed for meal if he has the facilities on his farm to feed the meal to the very best advantage and secure from it at least three-fourths of the fertilizing value it contains in the form of yard manure. It is needless to point out the remarkable benefits obtained from the use of yard manure on soil types quite markedly deficient in vegetable matter.

By disposing of the seed and utilizing the meal in the manner suggested several benefits are thus obtained by the farmer. He not only secures a larger monetary return for his seed in the first place than it can be made to bring him either as feed or fertilizer, but

by utilizing the meal he can increase the number of livestock kept on his farm and thus add to his supply of yard manure. When doing this he is increasing the vegetable content of his soil, an essential and all-important matter. Finally, he is adding a part of the fertilizer to his soil in a form which not only promotes fermentation, but prevents the plant food from all becoming available at once, thus affording the crop time to take it up and utilize it as it grows.

Where the farmer sells his seed, therefore, his interests are fully protected and he is the gainer rather than the loser by the transaction. Of course, the per cent. of increment won by the exchange depends much on his individuality and the skill with which he handles the product. Even where he exchanges the seed for meal and uses the latter for fertilizer, there is still an advantage in his favor, but to secure the largest return he must feed it for obvious reasons.

Human Food Value in Cotton Seed.

While the producer should be thoroughly protected in all business transactions and secure for himself the largest possible return, there is another side to the cotton seed problem which must not be overlooked. The family of the land owner and the people living in the towns and cities must be fed and nourished to the best advantage. A ton of seed, as all know, contains a large quantity of oil. Under ordinary methods of practice from 40 to 44 gallons may be extracted, depending considerably on the equipment used for expressing the oil and the quality of seed grown.

This oil is valuable in its crude form to the farmer, and, of course, can be purchased in this condition at a reasonable price. It may be used, for instance, for greasing animals to keep ticks off them in infested territory. It is a cheap and efficient material to use for this purpose. It may be used as the basis for administering many forms of medicine to livestock with advantage. When it is refined it provides the farmer with a desirable substitute for lard and adds wholesomeness and variety to the dietary of his family.

Oil constitutes one of the important items in our national balance sheet, the quantity exported bringing nearly \$40,000,000 a year in gold into this country. When the oil is exported it does not hurt the land as would be the case with the seed or meal, for the oil is a carbohydrate and valuable chiefly as a source of fuel and energy.

The fact that there is a decrease in the

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supply of meat animals in this country is noted with concern in every quarter. This means, of course, that cottonseed oil is becoming a more and more important factor in the nutrition of the American people, and since extracting the oil from the seed may be done to the advantage of the land owner and without injury to the value of the by-products for feed or fertilizing purposes, it is easy to see what a remarkably fine arrangement nature has made with respect to this matter.

There is often an undue amount of suspicion in the minds of many persons with reference to a discussion of a subject of this nature. Sometimes the farmer thinks that he is not getting a fair return for his seed, and that by keeping them at home he can utilize them to better advantage. All the investigations of capable and independent scientific men, however, are opposed to this idea, which, after all, is founded on notion and not on fact, investigation and close observation.

What the farmer should receive for his seed in the way of money is, of course, a debatable question, and he is entitled to receive the largest return possible. This is a matter of barter and sale, and can be adjusted satisfactorily between the buyer and seller without great difficulty. But unless the farmer is called on to sell his seed at a price clearly below their market value for manufacturing purposes, it is to his interest in 99 cases out of 100 to do so unless we can not afford to place dependence on what our experiment station and research workers tell us.

REFRIGERATING INDUSTRY IN U. S.

(Concluded from page 24.)

were packed in boxes holding about 60,000 each and placed in cold storage at about 40° F. (5° C.), where it was found they could be kept for six months or more without food. At the proper time they are brought out into warm surroundings and sent to the infested districts to feed upon the aphids, quickly ridding the plants of this pest, and themselves doing no damage whatever.

Another interesting extension is in the preservation of the delicate ferns that grow in great abundance in the forests of Massachusetts, New Hampshire and Vermont and are in great demand in the Eastern cities for decorative purposes during the holiday season. Millions of these ferns are collected in the early fall, packed in boxes, holding about 5,000 or more each, placed in layers, with moss at the top and bottom, and stored at about 28° F. (-2° C.). They come out two or even three months later in almost perfect conditions. A new industry was thus created.

In a New York Zoological Park, refrigeration is used to retard the opening of cocoons of rare and beautiful insects and moths, so that their short-lived beauty may be shown in the parks throughout the entire summer season.

Refrigeration is found to be advantageously applied in the preservation of seeds, such as apple and other fruit seeds and including also seed potatoes and grains. The fruit seeds are frozen and held at freezing temperatures, seed potatoes and grains at temperatures just above the freezing point of water. The chairman of the Committee on State and National Investigations of the American Association of Refrigeration, Dr. M. E. Pennington, in her report in 1912, told of the work of the Bureau of Plant Industry of the United States Department of Agriculture on grain standardization, which includes the effect of refrigeration in the carrying and keeping of grain, and added: "It is the opinion of the chairman of the committee that the time is not far distant when grain will be transported under refrigeration and the

handling of grain will be considered in the light of the handling of perishable produce."

The freezing of fresh, ripe berries, including also cherries and holding same in the frozen state until ready for use is an application of refrigeration recently introduced and used by bakers and others. Fresh crushed strawberries placed in bottles, without heating, are being preserved in cold storage with success.

Other New Applications of Refrigeration.

Among other minor new applications of refrigeration is its use in the shipment of date palm shoots or cuttings. The importation of date palm cuttings for proposed date orchards in California, where climatic conditions for same are said to be ideal, was begun several years ago, but so large a percentage of these cuttings failed to grow, as to discourage the efforts of the horticulturists. A former member of the government experiment station hit upon the idea of shipping the cuttings under refrigeration in order to prevent incipient growth and consequent weakening during the ocean transport. The cuttings were therefore iced on board ship and transported overland in refrigerator cars. Of the cuttings so shipped only a few died, nearly all showing vigorous growth.

The use of refrigeration for curing or preventing tropical diseases and in relieving, and in some cases apparently curing, the distressing affliction known as "hay fever," is among the uses for refrigeration just now being developed.

In the scientific field tests are being made under the direction of the Government Bureau of Standards, at Washington, D. C., to determine certain fundamental units of refrigeration, this work having been undertaken upon the request of the American Association of Refrigeration. At the University of Illinois elaborate tables have just been compiled based upon all the authentic investigations made in Europe and America on the properties of saturated and superheated ammonia, all figures being transposed into English units. The United States Department of Agriculture is engaged in making further tests and experiments on methods of handling and storing fruits, especially the small and tender fruits, by means of refrigeration. Investigations are also under way by the Department on the methods of handling fresh fish by freezing and cold storage.

The American Association of Refrigeration has undertaken to carry on further investigations of some of the more pressing problems of refrigeration. Special investigations are also under way or planned at several high educational institutions, notably at the Massachusetts Institute of Technology, at Cornell and Columbia Universities and at the University of Illinois.

In the field of invention, the development of the so-called "flooded freezing system," or gravity feed of liquid refrigerant through the freezing coils in ice tanks, has reached quite general application. The removal of coils in freezing tanks and substitution of brine cooler laid in one end of tank through which all brine is circulated, is another recent development. The several systems of producing clear crystal ice from raw, or undistilled, water have reached practical development, and a number of raw water ice-making plants are now in operation or being installed. Recent improvements in construction of ammonia condensers have resulted in considerably greater efficiency of this important portion of the refrigerating plant. Lack of space and time forbids mention of other notable inventions and improvements.

Magnitude of the Refrigerating Industry.

A brief survey of the development of the refrigerating industry in America will give some idea of its magnitude at the present time. It may be added that refrigeration is today still at its high-water mark of growth and extension.

The latest available authentic statistics indicate that there are about 3,500 ice manufacturing establishments in the United States, equipped with machinery capable of producing between 18,000,000 and 20,000,000 tons of ice annually. The latest United States census reports gave the number of ice factories

as 2,004 in 1910, but this covers only those engaged primarily in ice making. We know that many meat packers, brewers and others engaged primarily in other lines also operate ice-making plants—some of these of very large capacity—which partly accounts for the wide discrepancy between the census report and the facts as they exist. The capital invested in the ice-making industry proper is estimated at not less than \$150,000,000.

Cold storage includes so wide a field that it is difficult to estimate even the number of places where cold storage on a large or small scale is carried on, for at least 2,000 meat markets have cold storage rooms, cooled with refrigerating machinery; about 1,000 creameries, dairies and cheese factories are so equipped; about 350 ice cream factories and about 250 produce dealers have cold storage rooms equipped with refrigerating machinery. Again, in the fruit industry there are many hundreds of small cold storage establishments scattered throughout the country, where fruit is held for short or long periods under refrigeration, and adding to all these between 800 and 900 commercial cold storage warehouses, varying in capacity from 25,000 cubic feet to 11,250,000 cubic feet capacity, which is the capacity of the largest single cold storage house in America, and some idea is gained of the vast extent of cold storage at its present state of development.

A list of the principal users of refrigerating machinery in the United States would include the following:

Users of Refrigerating Machinery.

- About 3,500 ice-making plants.
- About 1,300 breweries.
- About 600 packinghouses and abattoirs.
- About 2,000 meat markets.
- About 1,100 creameries, dairies and cheese factories.
- About 700 hotels.
- About 1,000 fruit storage houses.
- About 350 produce commission houses.
- About 320 office and public buildings.
- About 300 provision dealers.
- About 300 liquor stores.
- About 300 hospitals.
- About 300 candy makers and confectioners.
- About 250 restaurants.
- About 250 schools and colleges.
- About 200 groceries.
- About 160 apartment houses and residences.
- About 150 fish freezing and storage houses.
- About 150 oil and lard refineries.
- About 100 carbonated beverage manufacturers.
- About 100 bakeries.
- About 100 club houses.
- About 50 fur storage establishments.
- About 50 florists.
- About 50 laboratories.
- About 40 manufacturers of explosives.
- About 30 army posts.
- About 30 mineral water bottlers.
- About 20 bleachers and dyers.
- About 20 glue factories.
- About 18 photo material manufacturers.
- About 15 textile works.
- About 15 soap factories.
- About 13 electrical instrument manufacturers.
- About 10 sugar refineries.
- About 5 manufacturers of ammonia.

Besides, numerous refrigerating installations are used in mercerizing works, silk and woolen mills, in the manufacture of perfumery, celluloid, isinglass, flavoring extracts, candles, glass, acetylene gas, vinegar, wine, snuff, tobacco, leather, cutlery, agricultural implements, optical instruments, temperature measuring instruments, liquid air, etc.; for shaft sinking and tunneling; for recovery of alcohol and ethers; for prolonging animal hibernation; for retarding plant growth; for cooling air in hotels, restaurants, stores, factories and residences, and for numerous other uses.

The total number of refrigerating machines in actual use in the United States is estimated at about 20,000. The capital invested in construction of machinery for refrigeration is estimated at least \$50,000,000. The capital invested in industries depending wholly or largely upon the aid of the refrigerating machine is estimated at more than \$1,000,000,000.

HIDES AND SKINS

(DAILY HIDE AND LEATHER MARKET)

Chicago.

PACKER HIDES.—The packers are generally firm, and there is practically no change to report in any selection. The buyers feel that packer hides are about top, and while packers will not admit this it is noticeable that they are not asking further advances, being seemingly content to keep hides moving as far ahead as buyers will take them. Some packers are claiming to have declined 19½¢ bids for native steers, and are holding September-October salting at 20¢, but one packer is reported to be openly offering at 19¾¢. Some sources are talking about a line of some kind of packer hides selling to January 1, but so far as can be learned the only selection that has sold to this extent is native bulls, which moved quite awhile ago. Some of the packers have sold light and extreme Texas, also branded cows to December 1, which may have occasioned this talk, but this trading was last week and the week before. Quotations all around are steady to firm. Native steers, while nominally held at 20¢, by most packers for October and also late September salting, are not quotable over the former range of 19¾¢@20¢, for although some packers claim that they have declined 19½¢ bids, one packer openly offers at this price. As a matter of fact buyers are not showing any too much interest in October-November salting even at 19¾¢. Texas steers are firm, but the asking price of 19¼¢ for November heavies has not been paid as yet, with sales of earlier salting at 19¢. Two thousand October heavies have sold at 19¢. Of course the packers are more insistent on the advance for November takeoff on account of grubbing privilege allowed. Lights have not brought under 18¾¢ for either September, October or November on latest business, and extremes as based on last traffic continue to range at 18@18¼¢. Butt brands have not brought over 18¾¢, with up to 19¢ asked. Colorados are apparently firm at 18¾¢, with a recent sale of Octobers at this price as noted yesterday, and apparently these are relatively firmer than butt brands in comparison. Branded cows are unchanged at 18¼¢, with up to 18½¢ asked, but recently a sale of Octobers was noted at 18¼¢. The market for the present is hardly quotable over 18¼¢. Native cows are steady at 18½@18¾¢ for both heavy and lights of current salting, with the outside price secured only for special weights, though generally asked for both heavy and light of late takeoff. The last of the winter light native cows have been sold, amounting to around 4,000@5,000, 40-lb. and up at 17¢, which are understood to be going to harness leather tanners. Former business in 25@45-lb. lights also Southwestern 55-lb. and down was at 18¼¢, and some parties believe the native cow market better represented at the wide range of 18¼@18¾¢. Native bulls continue to be held at 16¢ for July to January. Branded bulls quoted 15@15½¢ asked.

COUNTRY HIDES.—There is little change. The dealers continue rather loath to anticipate business, preferring to await later receipts and in the meantime are naturally talking full prices. While some inquiry has

been claimed of late for heavy cows, the market on heavy hides, both cows and steers, is not as firm at the top prices as lighter stock buffs and extremes. Buffs are quotable on a range of 16¼@16½¢, with the outside price still demanded. Most of the late sales have been at the inside figure, but the market is quotable 16¼@16½¢. Heavy cows are also nominally held at 16½¢, and while a better inquiry has been claimed for these of late, buyers will not pay over 16¼¢, and the market for heavy hides continues relatively less strong than for lighter weight stock. Extremes are firm at 17½¢ and well cleaned up, with that price recently paid as per sales previously noted. There are reports of another car of extremes selling at 17½¢, but it is believed by some that this refers to trading which was previously noted. Heavy steers range 16½@17¢. One small car of country packers lately brought the outside price, but were extra good quality. Bulls remain at 14¼@14½¢ asked, with last business at the inside figure.

CALFSKINS.—Strong. A packer is reported to have secured the full price of 23¢ for some skins, with no amount or further details given. Extra choice Chicago cities are now held at 22½¢, as against last sales at 21½¢, but 22¢ bids would likely be quickly considered. Regular lots of Chicago cities are nominal around 21@21½¢ in the absence of new business. Outside cities continue 20½¢ up to 21½¢ asked, and countries range 19½@20½¢.

SHEEPSKINS.—Packers are firm, as quality of present offerings is good, with up to \$1 asked for latest takeoff sheep and lambs, and prices for earlier week's salting range down to 90¢. October packer shearlings last brought 92½@95¢, while down to 80¢ is talked for previous salting. Outside city and country pelts are unchanged.

New York.

DRY HIDES.—There is a somewhat easier feeling in the market not only in River Plates but in common varieties as well, and although last sales of Bogotas and Puerto Cabellos, etc., were at the unchanged prices of 33¢ for both after Orinocos had sold down from 33½¢ to 33¢, it is now understood that some buyers who have been paying these top rates for several weeks are now entertaining lower ideas. Late arrivals of Bogotas are not reported taken, and further small arrivals include 667 Orinocos per the "Maracas" and 602 Central Americans per the "Prinz Joachim." River Plates continue to show an easy tone, and Buenos Aires are not quotable over 32½¢ now, if at that. Some parties claim that business can be done at 32½¢, but others say they can offer at 32½¢ and cannot find buyers to pay this. Cables from Calcutta, however, quote higher prices being asked there, and up to 10½¢ is now asked for Bazaar slaughters, but it is too early as yet for reliable quotations on Calcutta buffalo hides.

WET SALTED HIDES.—Some sales are reported of frigorifico steers, but prices quoted vary considerably, and are not fully confirmed. While some parties report 21¢ secured for La Blancas, with 5,000 sold, the price reported in the same quarters for 4,000 Sansinenas is 20 3/16¢, which is a decline of about ½¢ from the sales previously

noted. The "Prinz Joachim" brought 342 bds. of Santiago Cuban hides to a local commission house. Considerable difficulty is still experienced in getting hides out of Mexico, and some shipments from southern Mexico that were made from there last June have not put in an appearance here as yet.

CITY PACKER HIDES.—The lack of business for the past two weeks seems to be having some effect, and the packers are showing more interest in looking around for buyers, but the latter are indifferent as a rule and are looking for prices to ease off.

COUNTRY HIDES.—There is a somewhat easier feeling in the market, and in fact conditions have not been so strong as formerly for the past week or so as has been previously noted, but supplies in dealers' hands are still too limited to cause any material weakness. One car of Pennsylvania buffs was offered here today at 16¼¢ that has been held right along at 16½¢, and it is understood that this car was later sold at this price. A car of New York State hides 25 lbs. and up, consisting mostly of city butcher stock, was offered at 16¢ flat, and will probably be sold at this figure. There are other offerings, however, of carload quantities of New York State, Canadian and New England all weight regular country hides at 15½¢ flat that have not been sold. About 450 New York State hides have been sold here at from 15@15½¢ flat, which included one lot of 200 at 15½¢, a lot of 100 at 15¼¢, and two 75 lots at 15¢ flat.

CALFSKINS.—The situation continues unchanged, with no sales of consequence reported but dealers firm in their views and offerings generally light. Quotations are nominal.

HORSE HIDES.—The situation continues strong, and only small scattering lots are available, as dealers generally are closely sold up. Such small lots as are occasionally moved bring good prices. One sale was made today of a lot of 250 Canadian whole hides without tails at \$4.65 flat f. o. b. shipping point, with everything included such as ponies, glues, etc.

European.

The markets abroad continue to show an easy tone, and if anything the situation is even easier than heretofore. American buyers as a rule are holding off, but it is expected that Europeans may operate at slight declines. The situation is not weak, however, and some buyers here who reduced their buying limits on dry calfskins about 3@4 per cent. found that most of the offerings made to them were later sold elsewhere.

Boston.

Sales include 2,000 more buffs at 16½¢, and 1,500 extremes at 17½¢, both from good Middle West points for prompt shipment. Some dealers ask ¼¢ over this, which tanners refuse to pay.

PREDICT CANADA BEEF SHORTAGE.

A well-posted Canadian livestock dealer from Toronto informs us that quite a few Canadian cattle will go into Eastern States this fall, but he says they will all practically be on the stocker and feeder order, and should cut but little figure in the fat cattle market for some time to come, although they will doubtless have the effect of lowering the values of stockers and feeders. This gentleman furthermore states that the farmers and feeders in Canada have none too many stock cattle for their own requirements, and he believes values will soon adjust themselves to a higher basis, due to the broader market they now enjoy, and furthermore says that he believes that a free movement of stock cattle from Canada to the United States will be reflected by such a shortage of fat cattle in Canada within the next 12 months that the population at large will petition their government to take off the import duty they now have to pay on live cattle and dressed beef from the United States.

Chicago Section

Evidently rightly named—merely Cubs.

The packers have a number of tanks, too.

Ever and anon we hear of Colonel Lewis—his whiskers.

The bigger they are the harder they fall. Ask any Giant.

Wot's the use chewing the rag about that slit skirt? Let'er rip!

Looks like the "morbid feeling" had its hooks on Chicago, all right!

They've cut down that tree that stood so long in front of Kansas City, Mo.

Chicago Board of Trade memberships still hover around \$2,200 net to the buyer.

Snow fell Monday evening in and on Chicago, and broke its face. No wonder!

One of the reasons some people cry at a wedding is that they haven't the nerve to laugh.

Every once in a while one hears of Fred Busse and Barney Mullaney. Think they'll ever come back?

Speaking of interfering with home industry, what about those emigrants coming over here with large families?

T. C. Sullivan, Swift & Company's popular provision manager in New York, was in Chicago during the week.

Seeing that the world will last only 100,000,000 years more, what's the use of all this fuss and argument, anyhow?

Jevver stop to think of the possible life that dollar bill you have in your vest pocket has led, and its possible associations?

The man higher up these reformers are after all the time must have clumb higher up, as he seems to be out of their reach.

Swift & Company's sales of fresh beef in Chicago for the week ending Saturday, October 18, 1913, averaged 11.68 cents per pound.

England needn't swell up and bust 'cause she has a Pankhurst. Didn't we have our own Carrie Watson and Carrie Nation, by gosh?

The canning boss may be pleased to know that scientists have concluded the world will come to an end in 100,000,000 years. Oh, well!

Much depends upon what kind of a dog it is when it comes to this "kicking around" stunt. Mighty interesting experiment with some dogs.

Spencer's record, even if true in every detail, as he has confessed it, is tame—awful tame—compared with that of any packer in the United States.

Sir Thomas Shamrocks Lipton is busy building another Shamrock. What luck he may have this time remains to be seen. He's game, anyhow.

The Jim O'Leary of Monte Carlo—otherwise Prince Albert of Monaco—hath returned to his own back yard. Another foreign "notable" is here—Pankhurst.

The season for indoor games is on. Over at "Fritz's Place" the other night the control wagon took six out of an indoor pinochle game, two being hospital cases.

We passed up the finest chance ever of going plumb to Hades when we let Panky in. Oh, well, p'raps something else will come along. Gotta go, anyway!

That "campaign of education" among the farmers on raising everything is a joke. They have and are "raising" everything, and propose to allow it to stick there, too!

Charles Wissmann, the celebrated hotel and restaurant delicatessen and meat supply man of New York, was in Chicago on business the latter part of this week.

The word "hover" is quite correct as applied to Board of Trade news. Most of the "hovering" used is consumed on and around the Board. Hospitals come next, then aviators.

Boston is probably less worried over the beef shortage than any other hamlet in the country. "Pork and" ain't so worse, now and again. As a steady diet it's—well, never mind!

The present United States administration and England's affairs seems to have annexed Hearst's goat, and landed him on the verge of imbecillitis-nervitis-collapsicus. Poo-ah buggah!

All there is to the secret of making good sausage is: Grind up any kind of good meat, season it with salt and pepper, and stuff it into a casing. Now, some goof say, "That ain't so!"

One darn fool asked us the other day: "Why is meat so high?" and we answered: "Simply because Thaw bust outa Mattea-wan!" That disposed of any d. f. argument right there!

To offset all the dire disaster several changes in our laws may bring upon us, we have the oyster, the pumpkin and mince pie, and soon the turkey and the jackrabbit. What do we care?

The extraordinary amount of free fatty acid hysterical advertising Mrs. Pankhurst has had should (owing to our present morbid state of mind) result in gratifying results—at the gate.

Just to show how mean a packer can be. He buys usually as low as he can, and sells as near the top of the market as he can. No other business man would be guilty of such a contemptible thing.

Mrs. Pankhurst's contempt for "man-made laws" sports another feather in its bonnet. She, however, thinks the American husband is much tamer and better trained than the English product. Nice man!

The tariff will be lucky if it does not come in for its share of the blame for the cost of meat. In fact, it is already asserted that sheep men are going to quit raising sheep on account of the free wool item.

The farmer trust doesn't like competition worth a darn, eh? Don't ever run away with the idea that the farmers want to see any more cattle raised than sufficient to hold prices at the top. Why should they?

While doing The Yards and vicinity the Prince of Monaco and King Rakeoff at Monte Carlo had Ed. Merritt, Armour's advertising manager, as chaperon. Further than that deponent sayeth not. Some chaperon!

Evidently Harry Thaw still has money. Three lawyers have handed a brief to Governor Felker to the effect that it is their belief that Harry was never legally indicted in New York. Now, either way, and likewise every way, to K. O. that belief or make it stick will cost MONEY.

H. C. SIEMER
Broker in Packing House Products
Agencies solicited. Correspondence invited.
Cable Address—"Remelsch,"
Hamburg, Germany

H. C. GARDNER. F. A. LINDBERG.
GARDNER & LINDBERG
ENGINEERS
Mechanical, Electrical, Architectural
Specialties: Packing Plants, Cold Storage,
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PACKING HOUSE EXPERTS
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CHEMICAL & ENGINEERING CO.
CHEMISTS
Specializing in Packing House and Cottonseed
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The Davidson Commission Company
519-520-521 Postal Telegraph Building CHICAGO, ILL.
BROKERS
Making a Specialty of MEATS, LARD AND
PACKINGHOUSE PRODUCTS of every descrip-
tion, COTTONSEED OIL AND PRODUCTS.

IF YOU ARE SELLERS, we have facilities for placing your offerings to best advantage in all directions.

IF YOU ARE BUYERS, give us a call. If we have no suitable offerings in hand we will find what you want.

TIN PLATING

Federal and State laws require copper kettles, coils, pipe, valves, tanks and other apparatus used in the preparation of food products tinned.

Write us for prices.

C. Doering & Son, Inc.
Lake and Sheldon Sts., Chicago, Ill.

WE ALSO MAKE

a complete line of all kinds of tanks, churns, vats, light and heavy sheet metal work for the packing house, butterine and oleo factory.

MERIT!!!

That is what makes our SUPREME ANHYDROUS AMMONIA

tower way above all others.

It is a product of which we are justly proud.

Did you ever hear of anyone change after once using

ANHYDROUS SUPREME AMMONIA

"EVERY OUNCE ENERGIZES"

Drop a line for a demonstration.

Supreme Means { Less Power—Less Coal—Less Expense.
More Refrigeration—More Satisfaction—More Efficiency.

NEW YORK
35th St. & 11th Ave.
Provision Department

MORRIS & COMPANY

CHICAGO
U. S. YARDS

The annual dairy show is on at the International Amphitheater, 42nd and Halsted streets. Col. W. E. Skinner is generalissimo. A baby show will be a feature, the Health Department states, to demonstrate the importance of feeding pure milk. Sure, pure milk; not the regular milkman's variety, by gar!

Why the devil don't these gazumps who are everlastingly bawling about the high cost of provisions place their orders with some Board of Trade concern to stock 'em up? Better get busy. Cattle are scarce, hogs about all in or dead of cholera, and the sheepmen are going to quit. Argentina will not have over a couple of barrels of meat to spare for us in the next year, either.

An old, old "north countrie" ballad runs partly thusly:

Scores of women old and young,
Strong of muscle and glib of tongue,
Rushed and pulled up the rocky lane,
Shouting and singing this shrill refrain:
"Here's Flud Horison, for his hard heart,
Tarred and feathered and carried in a cart
By the women of Marblehead."
And it's in 'em yet. Mere man, beware!

Patrick Cudahy, the Milwaukee packer, whose opinion is usually very close to being right, says the tariff won't cheapen meat. "When ranges were free," he says, "it paid to grow large herds of cattle, but now grazing land is limited and herds are smaller." However, being a packer, his opinion will be lightly considered by the great bulk of newspaper readers. Not a bad idea to allow such people do their own figuring.

"Brer" Jim Poole says: "If your butcher asserts that meat scarcity necessitates advancing prices call him down. Complaint of steadily ascending cost to the consumer is audible and is justifiable. For three weeks

past, in fact ever since the American Meat Packers' Association held its convention at Chicago Stock Yards, values have been tumbling. In the rank and file of cattle declines ranging from 40 to 75 cents per cwt. have been effected. Hogs are \$1.25 lower than the September high spot, and both sheep and lambs are considerably lower than in August, the decline being \$1 per cwt. in many cases. All the hysteria indulged in at the packers' convention about 'beef famine' and 'dollar beefsteak' was unwarranted, as supply has been constantly in excess of market requirements. It is true no such surplus in excess of current needs exists as in the days of plenitude, when packers were filling their freezers with cheap grass beef at this season, but the famine scream is wholly unwarranted."

Wow! The packers are just about as hysterical as "Brer" Jim is consistent. Give 'em hell, Jim!

MONEY FOR MEAT PRODUCTION.

The livestock and other farm papers have had a lot to say about the discrimination by banks against cattle "paper." They would make it out that it is difficult for livestock interests to get capital to carry on meat production. That discrimination against cattle paper is being made by the banks which make a specialty of handling that class of security was denied by W. A. Heath, president of the Chicago Livestock Exchange National Bank. He said:

"It is true that there is an enormous request for cattle loans, and it is also true that the banks have been obliged to refuse some of them. But that there has been any refusal to loan on cattle paper, simply because it is cattle paper, may be very much doubted. At least, we have not rejected any loans on that account. The stringency of the money market has made the bankers more likely to examine every possible loan security with great care, and, naturally, we have done the same with cattle paper, but no more so than we have with any other

form of security. The demand for cattle loans has been very strong, and this is only natural, in view of the fact that the future seems to promise a shortage, and that every farmer feels as though he wanted to put a few cattle on feed for the coming season.

"There has been some disposition in some quarters to make it appear that cattle paper is not desirable. In my opinion there is no form of security now being offered that is better. In the old days when enormous sums were loaned on range cattle this might not have been true, though I venture the assertion that fewer losses have been taken by the banks and loaning companies on cattle paper than on any other form of collateral.

"Whether or not a bank will make a loan on cattle for feeding depends to a great extent on the man who makes the application. I would rather loan to a man who is rated at \$10,000 and who has honesty in his favor, together with a knowledge of the cattle feeding business, than I would to a man rated at \$100,000 who was feeding cattle as an experiment or as a pastime. Banks which loan on cattle paper have to exercise a little more care, but when they do make loans they are as safe as they could be with any other kind of paper.

"There has been some disposition shown on the part of some banks to withhold loans on sheep, but even here the tendency is not very marked, and I believe that sheep paper is perfectly good. The effects of the tariff were discounted almost a year ago, and the manner in which the country has been buying feeding lambs, almost without a price deviation for the past month, indicates that the feeders have little apprehension.

"The faith that banks and loan companies have in cattle paper under ordinary conditions may be shown by the mere statement that loans are made up to the full extent of the purchase price of feeding cattle. And where loans are being made now they are largely on that basis. This seems to be a complete answer to the expression we sometimes hear that cattle loans are precarious ones."

CHICAGO MARKET PRICES

WHOLESALE FRESH MEATS.

Carcass Beef.

Prime native steers	13 1/4 @ 13 1/2
Good native steers	12 1/4 @ 13 1/4
Native steers, medium	12 1/4 @ 12 1/2
Heifers, good	12 1/4 @ 13
Cows	11 1/4 @ 11 1/2
Hind Quarters, choice	@ 16
Fore Quarters, choice	@ 11 1/2

Beef Cuts.

Cow Chucks	9 @ 9 1/4
Steer Chucks	11 @ 11 1/4
Boneless Chucks	@ 12
Medium Plates	@ 8 1/4
Steer Plates	@ 8 1/4
Cow Rounds	10 @ 12
Cow Loins	13 @ 13 1/4
Steer Loins, Heavy	@ 19 1/2
Beef Tenderloins, No. 1	@ 35
Beef Tenderloins, No. 2	@ 29
Strip Loins	@ 13 1/4
Sirloin Butts	@ 17
Shoulder Clods	@ 13
Rolls	@ 15 1/2
Rump Butts	12 @ 14 1/2
Trimnings	@ 10
Shank	@ 7
Cow Ribs, Common, Light	9 1/2 @ 10 1/2
Cow Ribs, Heavy	@ 14
Steer Ribs, Light	@ 16 1/4
Steer Ribs, Heavy	@ 17
Loin Ends, steer, native	@ 17
Loin Ends, cow	@ 15
Hanging Tenderloins	@ 12
Flank Steak	@ 15
Hind Shanks	@ 6

Beef Offal.

Brains, per lb.	@ 7
Hearts	@ 9
Tongues	@ 17 1/4
Sweetbreads	22 @ 23
Ox Tail, per lb.	@ 8
Fresh Tripe, plain	@ 5
Fresh Tripe, H. C.	@ 7
Brains	@ 9
Kidneys, each	7 1/2 @ 8

Veal.

Heavy Carcass, Veal	10 1/2 @ 11
Light Carcass	16 @ 16 1/4
Good Carcass	@ 17
Good Saddle	@ 17 1/2
Medium Backs	@ 14
Good Racks	@ 15

Veal Offal.

Brains, each	7 1/2 @ 8 1/4
Sweetbreads	60 @ 75
Pickles	60 @ 70
Heads, each	25 @ 30

Lamb.

Good Caul	@ 11 1/4
Round Dressed Lamb	@ 13
Saddles, Caul	@ 14
H. D. Lamb Racks	@ 9 1/4
Caul Lamb Racks	@ 9
H. D. Lamb Saddle	@ 16
Lamb Fries, per lb.	@ 18
Lamb Tongues, each	@ 4
Lamb Kidneys, each	@ 1 1/4

Mutton.

Medium Sheep	@ 9
Good Sheep	@ 9 1/4
Medium Saddle	@ 10 1/4
Good Saddle	@ 10 1/2
Good Racks	@ 8
Medium Racks	@ 9
Mutton Legs	@ 12
Mutton Loins	@ 7
Mutton Stew	@ 6 1/4
Sheep Tongues, each	@ 2 1/4
Sheep Heads, each	@ 10

Fresh Pork, Etc.

Dressed Hogs	@ 13
Pork Loins	@ 17
Leaf Lard	@ 11 1/4
Tenderloins	@ 32
Spare Ribs	@ 12
Butts	@ 15
Hocks	@ 8
Trimnings	@ 11
Extra Lean Trimnings	@ 14
Tails	@ 5
Snouts	@ 6
Pigs' Feet	@ 4
Pigs' Heads	@ 6 1/4
Blade Bones	@ 9
Blade Meat	@ 10
Cheek Meat	@ 9
Hog livers, per lb.	2 1/4 @ 3 1/4
Neck Bones	@ 4
Skinned Shoulders	@ 13
Pork Hearts	@ 9
Pork Kidneys, per lb.	4 @ 6
Pork tongues	10 @ 13
Slip Bones	@ 6
Tail Bones	6 @ 6 1/4
Brains	@ 5
Backfat	@ 11 1/2
Hams	@ 16
Coles	@ 13
Bellies	@ 17 1/2
Shoulders	12 1/2 @ 13

SAUSAGE.

Columbia Cloth Bologna	@ 13
Bologna, large, long, round, in casings	@ 12 1/4

Choice Bologna	@ 15 1/2
Frankfurters	@ 13 1/2
Blood, Liver and Headcheese	@ 11 1/2
Tongue	@ 14
Minced Sausage	@ 15 1/2
Luncheon Sausage, cloth paraffine	@ 18 1/2
New England Sausage	@ 18 1/2
Compressed Luncheon Sausage	@ 18 1/2
Special Compressed Ham	@ 18 1/2
Berliner Sausage	@ 16 1/2
Boneless Butts in casings	@ 26
Oxford Butts in casings	@ 19 1/2
Polish Sausage	@ 13 1/2
Garlic Sausage	@ 13 1/2
Country Smoked Sausage	@ 17 1/2
Farm Sausage	@ 17
Pork Sausage, bulk or link	@ 13 1/2
Pork Sausage, short link	@ 14
Boneless Pigs' Feet	@ 10 1/2
Luncheon Roll	@ 18
Deliatessen Loaf	@ 18 1/2
Jellied Roll	@ 18 1/2

Summer Sausage.

Best Summer, H. C. (new)	@ 24
German Salami (new)	@ 24 1/2
Italian Salami	@ 20 1/2
Holstener	@ 20
Metwurst, New	@ 22
Farmer	@ 22

Sausage in Oil.

Smoked Sausage, 1-50	@ 6.50
Smoked Sausage, 2-20	@ 6.00
Bologna, 1-50	@ 6.00
Bologna, 2-20	@ 5.50
Frankfurt, 1-50	@ 6.50
Frankfurt, 2-20	@ 6.00

VINEGAR PICKLED GOODS.

Pickled Pigs' Feet, in 200-lb. barrels	@ 10.50
Pickled Plain Tripe, in 200-lb. barrels	@ 8.35
Pickled H. C. Tripe, in 200-lb. barrels	@ 10.30
Pickled Ox Lips, in 200-lb. barrels	@ 15.50
Pickled Pigs' Snouts, in 200-lb. barrels	@ 15.50
Lamb Tongues, Short Cut, barrels	@ 8.50

CORNED, BOILED AND ROAST BEEF.

1 lb., 2 doz. to case	Per doz. \$2.45
2 lbs., 1 or 2 doz. to case	@ 4.65
6 lbs., 1 doz. to case	@ 17.85
14 lbs., 1/2 doz. to case	@ 38.80

EXTRACT OF BEEF.

2-oz. jars, 1 doz. in box	Per doz. \$3.25
4-oz. jars, 1 doz. in box	@ 6.25
8-oz. jars, 1/2 doz. in box	@ 11.50
16-oz. jars, 1/4 doz. in box	@ 22.50
2, 5 and 10-lb. tins	\$1.50 per lb.

BARRELED BEEF AND PORK.

Extra Plate Beef, 200-lb. barrels	@ 17.00
Plate Beef	@ 17.00
Prime Mess Beef	@ 17.00
Extra Mess Beef	@ 17.00
Beef Hams (220 lbs. to bbl.)	@ 24.50
Rump Butts	@ 22.00
Mess Pork, old	@ 20.25
Clear Fat Backs	@ 25.00
Family Back Pork	@ 25.00
Bean Pork	@ 17.25

LARD.

Pure leaf, kettle rendered, per lb., tcs.	@ 12 1/2
Pure lard	@ 11 1/2
Lard substitutes, tcs.	@ 9 1/4
Lard, compound	@ 9 1/4
Cooking oil, per gal., in barrels	@ 60
Cooks' and bakers' shortening, tubs	@ 11 1/2
Barrels, 1/2 c. over tierces; half barrels, 1/2 c. over tierces; tubs and pails, 10 to 80 lbs., 1/2 to 1 c. over tierces.	

BUTTERINE.

1 to 6, natural color, solids, f. o. b. Chicago	15 1/2 @ 10 1/4
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DRY SALT MEATS.

(Boxed. Loose are 1/4 c. less.)	
Clear Bellies, 14 @ 16 avg.	@ 18 1/4
Clear Bellies, 18 @ 20 avg.	@ 18 1/2
Rib Bellies, 12 @ 20 avg.	@ 18 1/2
Fat Backs, 12 @ 14 avg.	@ 10
Regular Plates	@ 10 1/2
Clear Plates	@ 10
Butts	@ 8 1/4
Bacon meats, 1/2 c. to 1 c. more.	

WHOLESALE SMOKED MEATS.

Hams, 12 lbs., avg.	@ 17 1/2
Hams, 16 lbs., avg.	@ 17
Skinned Hams	@ 17 1/2
Calas, 4 @ 6 lbs., avg.	@ 11 1/4
Calas, 6 @ 12 lbs., avg.	@ 10 1/4
New York Shoulders, 8 @ 12 lbs., avg.	@ 13 1/2
Breakfast Bacon, fancy	@ 25
Wide, 6 @ 8 avg., and strip, 5 @ 6 avg.	@ 17 1/4
Rib Bacon, wide, 8 @ 12, strip, 4 @ 6 avg.	@ 14
Dried Beef Sats.	@ 20 1/2
Dried Beef Insides	@ 22
Dried Beef Knuckles	@ 20
Dried Beef Outsides	@ 28 1/2
Regular Boiled Hams	@ 24
Boiled Calas	@ 25
Cooked Loin, Boiled	@ 17
Cooked Rolled Shoulders	@ 17

SAUSAGE CASINGS.

F. O. B. CHICAGO.

Rounds, per set	@ 18
Export Rounds	@ 23 1/2
Middles, per set	@ 72
Beef bungs, per piece	@ 19
Beef weasands	@ 6 1/4
Beef bladders, medium	@ 45
Beef bladders, small, per doz.	@ 75
Hog casings, free of salt	@ 70
Hog middles, per set	@ 10
Hog bungs, export	@ 18 1/2
Hog bungs, large medium	@ 10
Hog bungs, prime	@ 7
Hog bungs, narrow	@ 5
Imported wide sheep casings	@ 80
Imported medium wide sheep casings	@ 70
Imported medium sheep casings	@ 60
Hog stomachs, per piece	@ 4

FERTILIZERS.

Dried blood, per unit	3.00 @ 3.02 1/2
Hoot meal, per unit	2.70 @ 2.75
Concentrated tankage	2.45 @ 2.50
Ground tankage, 12%	@ 2.85 and 10c.
Ground tankage, 11%	@ 2.85 and 10c.
Ground tankage, 8 and 25%	@ 2.75 and 10c.
Crushed tankage, 9 and 20%	@ 2.70 and 10c.
Ground tankage, 6 1/2 and 30%	20.50 @ 21.00
Ground rawbone, per ton	24.00 @ 25.00
Ground steam bone, per ton	22.00 @ 22.50
Unground tankage, per ton less than ground.	@ 50c.

HORNS, HOOFS AND BONES.

Horns, No. 1, 35 @ 70 lbs., aver.	250.00 @ 275.00
Horns, black, per ton	24.50 @ 28.50
Horns, striped, per ton	33.00 @ 38.00
Horns, white, per ton	90.00 @ 95.00
Flat shin bones, 40 lbs. av., per ton	70.00 @ 75.00
Round shin bones, 38-40 lbs. av., per ton	75.00 @ 80.00
Round shin bones, 50-52 lbs. av., per ton	80.00 @ 90.00
Long thigh bones, 90-95 lbs. av., per ton	80.00 @ 90.00
Skulls, jaws and knuckles, per ton	37.50 @ 39.00

LARD.

Prime steam, cash	@ 10.50
Prime steam, loose	@ 10.27 1/2
Leaf	@ 10 1/2
Compound	8 1/2 @ 9
Neutral lard, No. 1	11 1/2 @ 11 1/4
Neutral lard, No. 2	11 1/4 @ 11 1/2

STEARINES.

Prime oleo	8 1/2 @ 9
Oleo, No. 2	8 1/4 @ 8 1/2
Mutton	8 1/2 @ 8 1/4
Tallow	7 1/2 @ 8 1/4
Grease, yellow	5 1/2 @ 6
Grease, A white	6 1/4 @ 7 1/4

OILS.

Lard oil, extra, winter strained, tierces	71 @ 73
Extra lard oil	68 @ 70
Extra No. 1 lard oil	63 @ 65
No. 1 lard oil	53 @ 55
No. 2 lard oil	52 @ 54
Oleo oil, extra	9 1/2 @ 10
Oleo oil, No. 2	9 1/4 @ 9 1/2
Oleo stock	9 @ 9 1/4
Neatsfoot oil, pure, bbls.	68 @ 72
Acidless tallow oils, bbls.	63 @ 68
Corn oil, loose	5.50 @ 5.60
Horse oil	6 1/2 @ 6 3/4

TALLOW.

Edible	7 1/2 @ 8
Prime city	7 1/2 @ 7 3/4
No. 1 Country	6 1/2 @ 6 3/4
Packers' Prime	7 1/4 @ 7 1/2
Packers' No. 1	6 1/4 @ 6 1/2
Packers' No. 2	5 1/4 @ 5 1/2
Renderers' No. 1	6 1/4 @ 6 1/2

GREASES.

White, choice	7 @ 7 1/4
White, "A"	6 1/2 @ 6 3/4
White, "B"	5 1/2 @ 6
Bone	5 1/4 @ 6
Cackling	5 1/4 @ 6
Horse	5 1/4 @ 5 1/2
Yellow	5 1/2 @ 6
Brown	4 1/2 @ 5
Glue stock	5 1/2 @ 5 1/4
Garbage grease	3 1/2 @ 4
Glycerine, C. P.	20 @ 21
Glycerine, dynamite	19 1/2 @ 20
Glycerine crude soap	13 1/2 @ 14 1/4
Glycerine, candle	15 1/2 @ 16 1/4

COTTONSEED OILS.

P. S. Y., loose	.40 @ 40 1/4
P. S. Y., soap grade	.48 1/4 @ 49
Soap stock, bbls., concn., 62 @ 65 f. a.	2 1/4 @ 2 1/2
Soap stock, loose, reg., 50% r. f. a.	1.50 @ 1.60

COOPERAGE.

Ash pork barrels	.80 @ .82
Oak pork barrels	.90 @ .92
Lard tierces	1.20 @ 1.25

CURING MATERIALS.

Refined saltpetre	5 1/4 @ 6 1/4
Boric acid, crystal to powdered	7 @ 7 1/4
Borax	4 @ 4 1/4
Sugar—	
White, clarified	@ 4 1/4
Plantation, granulated	@ 4 1/4
Yellow, clarified	4 1/4 @ 4 1/2
Salt—	
Ashton, in bags, 224 lbs.	\$2.35
English packing, in bags, 224 lbs.	1.45
Michigan, granulated, car lots, per ton	8.50
Michigan, granulated, car lots, per ton	8.75
Casing salt, bbls., 280 lbs., 2r @ 3x	1.80

LIVE STOCK MARKETS

CHICAGO

(Special Letter to The National Provisioner from the National Livestock Commission Co.)

Union Stock Yards, Chicago, October 22.

Just as predicted, we had a moderate run of cattle Monday, actual receipts being 17,822 head, including about 4,500 Westerns, and the choice handy weight and yearling steers sold readily at 10@15c. advance, while the rank and file of the offerings were steady to strong, and in some cases a dime higher, but weight was still "under the ban." Tuesday's run of 5,415 cattle included about 2,500 Westerns, and the meager supply of native steers on sale went at prices that were not quotably different from Monday's general level of values. Wednesday's run of 18,000 cattle included about 4,000 Westerns, and the receipts for the first three days of the week totaled 41,000 head, as compared with 43,000 for the same period a week ago, and the market ruled active and 10@15c. higher, yearling steers, weighing 800 lbs., making a new top of \$9.70, with several droves of choice yearlings from \$9.50@9.60, prime heavy beefs as high as \$9.30, and several bunches of prime handy weights from \$9.30@9.40. Quite a few choice heavy cattle, such as sold at \$8.75 a week ago, are bringing 9c. today, and the rank and file of the offerings is 25@35c. higher than the "low point" in the trade.

Butcher stuff receipts moderate and in sympathy with the improvement in the steer trade. On Monday butcher stuff sold 10@15c. higher, eased off a little on Tuesday and on Wednesday ruled fully steady with values showing a slight improvement over a week ago. "She" stuff is selling comparatively high for the time of the year.

Hog market still on the down grade. With a run of 27,000 Wednesday the market ruled very slow at the recent severe decline, bulk of the hogs selling at \$7.60@8; good to choice butchers going largely around \$8@8.15, with some fancy ones up to \$8.25; good to choice strong weight light and mixed, \$7.80@7.90; mixed packing around \$7.70@7.80; medium weight packers, \$7.65@7.75; heavy packers in poor demand and going at \$7.50@7.70; light weight pigs, \$5.75@6.25; 110@130-lb. weights, \$7@7.25. It seems only reasonable to expect some little recovery after this severe break, but it looks as if prices would go still lower before bottom is reached. While we are looking for some further decline, yet we don't expect to see the market go off much if any more than 50c. per cwt. from the present level. It looks as if there would be a pretty good demand for hogs when they get down around 7½c.

Receipts of sheep and lambs on Wednesday were estimated at 37,000, and our market opened a little stronger on lambs and steady on sheep. Receipts consist mostly of Westerns, which contain a large percentage of feeding stuff. We look for a fairly good trade on finished stuff from now on, and expect to see a little advance in prices. Westerns: Good to choice lambs, \$7@7.35; feeding lambs, \$6.25@6.65; light feeding lambs, \$5.50@6; good to choice wethers, \$4.65@5; feeding wethers, \$4.40@4.60; good to choice yearlings, \$5.75@6; feeding yearlings, \$5.40@5.60. Natives: Good to choice lambs, \$7.10@7.35; fair to medium lambs, \$6.25@6.75; culls and common lambs, \$5.50@6; good to choice ewes, \$4.40@4.60; cull ewes, \$3@3.50; breeding ewes, \$4.75@5; good to choice yearlings, \$5.75@6; good to choice wethers, \$4.75@5.

ST. LOUIS

(Special Letter to The National Provisioner.)

National Stock Yards, Ill., October 22.

Receipts of cattle for the week ending today amount to 24,000 head, which included 8,500 quarantine offerings. The offerings of beef steers this week included a good run of choice to prime steers, especially of the yearling variety. This kind sold generally from 25@35c. higher than last week, while good steers sold from 35@50c. higher. Medium quality steers sold from 50@75c. higher, and steers of common quality under \$7 are

quoted about 25c. higher. Yesterday two loads of strictly prime Hereford yearling steers weighing 910 sold to the packers for \$9.75; today one load of Hereford and Short-horn yearlings, weighing 935, sold to the packers at \$9.80, while a load of a little lighter stuff sold at \$9.75. These prices are the highest that have been paid in the West or South, for the year 1913, on any open market. Yearlings through the week have been in exceptional good demand. Heavy steers have set the record at this market by bringing \$9.50, this price being paid today for steers weighing around 1,400 lbs. A good portion of the strictly good to choice offerings sold generally over the \$9 mark. Cows are quoted for the week at 25c. higher. The top price paid on this kind was \$7.50, while the bulk of the offerings sold in a range of \$5.50@6.50. Heifers are easily 50c.@1 higher than last week. Quality has been generally good and \$9 tops were not infrequent, although the bulk of the medium to good kinds sold from \$7.50@8.50. Veal calves have moved on a generally higher basis, the top for the week being \$11. Very few Texas and Oklahoma steers were offered this week, most of the offerings on the quarantine side originating from States east of the Mississippi river. This kind sold generally on a steady basis, although in spots prices indicated a stronger tendency. Texas and Oklahoma steers sold on a generally \$10@15 higher basis.

Hog receipts were 41,700 this week. Hog values during the past week have experienced some rather severe declines. The market opened at the first of the week with a top of \$8.55. For the first two days prices only fluctuated in a range of 5@10c., while yesterday and today values declined about 25c. on each day. As compared with the high time for the week, values are fully 50c.@\$1 lower.

The sheep receipts for the week were 11,500 head. Mutton sheep have been running on a very even basis during the past week, and values are quoted at steady with a top for the week of \$4.50, most of the good offerings which went to the slaughterers selling at this price. Last week strictly good lambs went to the killers at a top of \$6.85; this week the general run of the offerings, which were strictly good, brought around \$7, while one bunch of lambs sold to a city butcher for \$7.15. The market generally is quoted at about 15c. higher.

KANSAS CITY

(Special Letter to The National Provisioner.)

Kansas City Stock Yards, Oct. 21, 1913.

Fed cattle are selling better this week, middle grades weaker. Receipts are liberal, but there is a larger percentage of stock grades than heretofore. The panhandle country of Texas is in the midst of its heaviest fall shipping, and Colorado cattle are also coming freely. Quarantine cattle are in small supply, and except for some Oklahoma yearlings at \$8.50 yesterday, are medium and low grade, steers at \$5.50@6.50, cows at \$4.25@5.50. Today's supply of cattle was pushed up to 22,000 head by including 30 cars of little Florida cattle, of all ages and sexes, brought in by Cudahy. While no other cattle of as low a class are being offered, this shipment proved a weakening influence on cows today. Some heavy native steers brought \$8.80 today, and mixed yearlings \$9.10.

Trade circles do not expect importations of beef to reach any great proportions, or to influence values of live cattle very much. Trade idealists are pleased with this prospect, as they believe this country is sufficiently resourceful to solve its own meat problem, and the most of them go farther, and say it must be done by raising more cattle on farms. However that may be, inquiry for all grades of stock cattle this fall has been greater than ever before from all except the dry sections. Since October 1 Kansas and Missouri find they have good wheat grazing and plenty of blue grass, and

their purchases of thin cattle have been up to a normal figure. Last week 36,000 cattle were taken to the country from here, out of 69,000 received.

Hogs are off 15 cents today, following heavy recent declines, which puts bulk of sales below eight dollars, range today \$7.65@7.95, top \$8.05. The decline is in line with the usual custom of packers at this season, and is being accomplished despite fairly liberal buying by shippers, but unless receipts increase after the packing season opens the first of November, prices will rise again.

Heavy receipts of sheep yesterday and today are selling higher, best lambs today \$6.80, bulk of the lambs \$6.40@6.65. Bulk of the feeding lambs are selling around \$5.75 this week, a very reasonable price, considering recent prices. Fat ewes bring \$3.50@4.25. After this week receipts will run lighter, though there will be a liberal number of range feeding lambs coming for some weeks ahead.

OMAHA

(Special Letter to The National Provisioner.)

South Omaha, Neb., October 21, 1913.

Cattle receipts are running away short of a year ago. The run last week was about 30,000 head, and the supply so far this month 91,000 head, or fully 25,000 short of the same period last October. Prices have been very uneven of late, but the proportion of corn fed beefs has been so small that there has been no appreciable decline except on the short fed and warmed-up grades. Choice yearlings brought \$9.15 today, but fair to pretty good 1,050 to 1,300-pound beefs are going around \$8.40@8.80, and common to fair warmed-up and short-fed grades at \$7.75@8.25. Western range beefs have been rather common in quality as a rule, and while good to choice grades are selling about as well as last week, the medium and common grades are all of 10@15c. off and slow sale at that. Choice range beefs are quoted at \$7.75@8.25, but the bulk of the fair to good rangers sell around \$7.20@7.60, and common to fair kinds and Texans at \$6@7. The market for cows and heifers has been very weak for several days

(Concluded on page 41.)

SLAUGHTER REPORTS

Special reports to The National Provisioner show the number of livestock slaughtered at the following centers for the week ending October 18, 1913:

CATTLE.

Chicago	16,672
Kansas City	28,873
Omaha	10,530
St. Joseph	11,899
Cudahy	634
Sioux City	2,186
South St. Paul	5,710
New York and Jersey City	12,318
Fort Worth	6,920
Philadelphia	3,540
Pittsburgh	3,549
Denver	1,438
Oklahoma City	2,019
Cincinnati	4,700

HOGS.

Chicago	51,203
Kansas City	32,711
Omaha	26,966
St. Joseph	28,513
Cudahy	6,790
Sioux City	18,068
Ottumwa	10,129
Cedar Rapids	2,423
South St. Paul	21,813
New York and Jersey City	31,990
Fort Worth	5,051
Philadelphia	5,170
Pittsburgh	11,580
Denver	3,480
Oklahoma City	6,960
Cincinnati	9,423

SHEEP.

Chicago	60,852
Kansas City	47,820
Omaha	30,464
St. Joseph	28,126
Cudahy	381
Sioux City	10,251
South St. Paul	6,473
New York and Jersey City	45,207
Fort Worth	2,421
Philadelphia	12,303
Pittsburgh	6,646
Denver	2,466

Retail Section

PRACTICAL TALKS WITH SHOP BUTCHERS

Expense of Delivering Small Orders Can Be Avoided

By a Veteran Retailer.

An old subject, yet one that is always of vital interest to the shop butcher, is the cutting down of unnecessary expense. And of all the unnecessary expense, the delivering of small orders is in a class by itself.

It remained for the butchers of Trenton, Mo., to get together and take drastic action on what is one of the worst abuses of a retail butcher business. They all agreed to abolish such deliveries and to leave it to customers to carry home their own small purchases made at odd times of the day.

Naturally, the butchers of a large city will say: "Oh, it's all right for a small town, where there are only a few shops, and they can co-operate and save a great deal of money." This is partly, but not wholly true. The butchers in a big city are working more or less under a big disadvantage regarding the delivery system. The "prime beef shop" keepers would think it a disgrace to ask one of their swell customers to carry home her Saturday and Sunday meat orders. And in a way it would be impossible.

But the shops that do a big business among the poorer or medium class of buyers could very easily inaugurate a system which, while it would not do away entirely with delivery expense, would so reduce the unnecessary expense that it would be an enormous saving in the course of a year. Many of this class of shop keepers in New York City run three and four horses and wagons every day.

Enormous Cost of Delivery Service.

Taking streets like 1st, 2nd, 7th, 8th, 9th and 10th avenues as an example, if the butchers on the different parts of these avenues got together and forgot their differences for the time being and considered ways and means, the saving to all of them would be so great that it would be well worth their while. If they stopped to think, they would realize that in the years they have been in business the tremendous amount of money they have spent, individually and collectively, for the delivery of small orders, would have made them wealthy. And to show the figures to prove the facts is the only way to force them to see it.

Take the case of a small shopkeeper who has only one horse and wagon—it would be impossible to get down to any smaller figures than that kind of shopkeeper—and figure everything at the lowest possible figure within reason, for one year.

A fairly decent horse costs \$150, a wagon \$150, a set of harness \$35; which is a first cost of \$335. The livery bills will be \$25 or more monthly; the blacksmith's bill, \$3 monthly; the driver \$32 monthly; wagon boy, for Saturdays only, \$4 monthly; wear and tear on horse, wagon and harness, \$6 monthly. This does not include re-painting of wagon.

It totals \$70 monthly, or \$840 for the year, which, with first cost, is \$1,175 delivery cost

for one horse and wagon. And as most of the up-to-date butchers have their rigs insured against accidents to the public and their own employees, that is another \$25, bringing it up to \$1,200 flat. The interest on that amount is about \$50 at savings bank rates, which makes the tidy sum of \$1,250 yearly.

A tidy sum, indeed, and well worth while making at least an effort to save!

Double this amount for the butcher who runs two rigs, as many hundreds do in a big city, and it can be readily seen why it is so difficult for many butchers to make both ends meet. Twelve hundred dollars a year to the small shopkeeper who has so much to contend with is a vast amount of money, and each year his rig is worth less.

The butcher does not realize that so much money is involved. He is like the schoolboy who came to his father in tears because his teacher had scolded him for giving a wrong answer, which was the father's fault. Upon the father's demanding to know why it was his fault, the lad said he was told to ask how much was a million dollars. "And," he continued, "when I asked you last night you said it was a hell of a lot. And that was the wrong answer, and the teacher punished me!"

And so it is a lot to a shopkeeper to keep a horse and wagon to deliver orders that could be just as well carried home by his customers. If he could but get the butchers in his neighborhood, who do the same kind of business, to positively refuse to deliver orders, he would be vastly better off.

The objection may arise: "Why, I use my horse and wagon to bring my goods from market and save expressage." True, he does save expressage. But how much goods does a small butcher think he could have delivered to his door for \$1,200 a year? At every distributing point there are market expressmen, who deliver all purchases at a reasonable figure, and who would be glad to make a flat rate to a steady customer. Let the expressman or the wholesaler worry about horses and wagons. Why should the butcher do it?

If the retail butcher's customers are confronted with the same situation in all the shops in the neighborhood (and naturally the movement would spread to other neighborhoods), it would be but a short time before it would come to be accepted as a necessity for them to carry their parcels home.

The Butcher as a Benefactor.

As for the woman who wants to go shopping, and stops in at her butcher's to have him send home 10 cents' worth of soup meat and a pound of round steak, she'd manage to get up a half hour earlier to do her marketing, thus making her retire a half hour earlier the evening before until she gradually "got the habit" and thereby improved her health and ran her domestic affairs more systematically. Who knows, the butcher

might eventually become a benefactor to mankind.

Funny, but true. It's just a good word for the butcher. He deserves it, because nobody likes the man with the bloody knife. The vegetarian looks at him with contempt; the kids are afraid of him; women watch him swing a big cleaver and hold their breath; men looking at him behind the block feel a sort of pity for him.

But somebody must be a butcher, and it's not so bad after all. The shopkeeper does not kill the cattle, he does not wring the necks of the chickens, or execute the turkeys, or murder the broilers, or assassinate the poor little squabbies, or make widows of the dear little lambies or orphans of the big buck's big families. Somebody else does that.

The butcher is not what his name implies. Usually he is a kind-hearted, good-natured chap who gives honest weight and often serves a poor woman when he knows she won't be able to pay her bill; donating many a piece of meat to the poor. And he always has a piece of liver for a stray cat and a bone for the dog, not speaking of the many pounds of bologna he gives away yearly to the hungry kids of the neighborhood.

He is usually tidy and orderly; his shop is well kept; the aroma of the fresh sawdust on the floor gives the freshness of the woods to the nostrils of the purchasing public. The regular rows of nice, clean, fresh poultry, the bright, red, juicy pieces of beef, the snow-white cauls of the lambs hanging on hooks in regular order behind him, the milk-white veal, are all so fresh and appetizing that if you are fond of the good things of the table these sights start the gastric juices flowing in anticipation of an old-fashioned fricassee, a juicy roast, a dainty French chop with a pink frill on it, or a well-broiled thick steak with thin slices of bacon. Sending forth the odors that make a hungry man—or woman, either—consider the butcher a Godsend to hungry humanity.

Give the butcher the glad hand; there's lots worse than he; always remembering that while the butcher's science is not as intellectual as astronomy, the gastronomy part of it is a sight more nourishing, invigorating and satisfying.

L. A.

TO LICENSE BUTCHERS IN KANSAS.

The butchers of Kansas want some sort of a law requiring a man to get a permit, or license, from the state, before he engages in the business of retailing meat. They have gone so far as to have a bill drafted making provision for such a state license.

This bill, possibly in considerably modified form, will be presented at the next session of the legislature, and the butchers think that with the assistance of the State Retailers' Association they can secure its passage. If the butchers get this law, it is likely that the grocers will go after a similar law.

The effect of the law would be to limit irresponsible competition. It would shut off the "winter butcher," and the "fly-by-night" retailer. By wiping out this class of competition, it is felt that the consumer will be protected from fraud, disease and impure food.

The State pure food authorities favor the license law for butchers, and will support it.

The bill proposed prohibits the sale, absolutely, of meat at retail by any one but a registered butcher. Every shop or store which sells meat must have at least one registered butcher in the employ of the firm. This is very similar to the present rules for registered pharmacists.

The Governor is to appoint a board of three examiners, to serve for a term of three years, to have charge of the enforcement of the law. The members of this board will each receive \$5 a day and expenses.

Within 90 days after the passage of the act, any butcher who has had five years' practical experience at the block, two of which were in Kansas, and is of good moral character, can get a certificate as a registered butcher by merely paying \$1.

After the first 90 days, every person desiring a butcher's license must take an examination, or else be a graduate of some recognized school providing a course in butchering. Four examinations are held each year. The fee for the examination is \$3.

The registered butchers are pledged to work in co-operation with the State Board of Health for the enforcement of pure food laws and regulations.—*Merchants' Journal.*

LOCAL AND PERSONAL.

Swan & Reynolds have purchased the meat business of T. A. McClanahan at Tecumseh, Neb.

Emil Swanson, who has had charge of the meat market of the Hughes-Mercantile Company, has opened a market for himself at Ishpeming, Mich.

Ernest DeHart, of Vickeryville, has opened a butcher shop at Palo, Mich.

C. L. Ferguson, the meat dealer at Cope-mish, Mich., has added a stock of general merchandise.

Mr. Gorrell has purchased the Pine meat market at Soldier, Kan.

Guy Roberts has moved his meat market from Gas City to Junction City, Kan.

S. J. Calfee has opened the City Meat Market at Oketo, Kan.

D. L. Lewis has opened a butcher shop on Main street, Boise City, Okla.

Smith & Murphy have opened the New City Meat Market on the west side of Broadway at Coweta, Okla.

S. S. Like & Company have opened a butcher shop in the Roland building, Okemah, Okla.

W. N. Burnham, of Lewis, Kan., has engaged in the meat business at Arlington, Kan.

E. E. Plank has purchased the meat and grocery business of V. H. Ellison at Lawrence, Kan.

Dan Dickey has closed up his meat market at Garfield, Kan.

Earhart & Earhart have engaged in the meat business at Troy, Kan.

J. Carrier has engaged in the meat business at Garnett, Kan.

Hill & Thompson are building an addition to their butcher shop at Priest River, Ida.

John Bottini has purchased the meat and grocery business of Chas. O'Neil at San Francisco, Cal.

Jensen & Mickelson have engaged in the meat and grocery business at 1928 East Third, Los Angeles, Cal.

The Frank L. Smith Meat Company at Portland, Ore., has been incorporated to conduct a wholesale business.

The Hansen Meat Market at Huron, S. D., has been destroyed by fire.

Wm. Breunicke has purchased a meat market at Waucoma, Ia.

G. Pfeiffer has purchased the meat market of D. M. McCorkle at W. Milton, O.

A. J. Schultdt has purchased the meat business of F. E. Bear at Toledo, Ia.

The Popular Sanitary meat market has been opened at Pittsfield, Mass.

E. W. Doughty will engage in the meat business at Winston-Salem, N. C.

S. P. Coy will engage in the meat business at Woodburg, Pa.

H. C. Lowell has opened his new meat market at Rockland, Mass.

H. Hunt has purchased a meat market at Auburn, N. Y.

W. Volk has purchased the meat market of M. E. Hagen at No. Mankato, Minn.

J. M. Morgan has opened a meat business at Crewell, O.

The butcher shop at Bluff, Ill., has been purchased by W. E. Black, of White Hall.

The Hansen meat market at Huron, S. D., has been destroyed by fire.

The meat market of George Trompeters at Peoria, Ill., has been damaged by fire.

The meat firm of Archer & Swartz at Dexter, Kan., has been dissolved. Mr. Swartz will continue the business.

L. Dangerfield has sold his meat business at Pacific Grove, Cal., to C. E. Baker.

A. Christ will engage in the meat business at Milltown, N. J.

G. R. Ferrell has opened a meat market at Steubenville, Ohio.

A. W. Mead, a meat dealer at Northfield, Mass., has made an assignment for the benefit of his creditors.

FRENCH MARKET FOR CANNED MEATS.

The steady rise in the cost of living in general and the retail price of meats in particular has brought about an increase in the importation of canned meats into France, reports Consul General Frank H. Mason from Paris. This is not astonishing when it is considered that the present retail prices for the best cuts of fresh meats in Paris are as follows: veal, 35 cents a pound, beef, 31 cents a pound; mutton, 26 cents a pound; pork, 26 cents a pound.

It is the impossibility of paying prices such as these that has led to an increase of over 30,000,000 pounds in the imports of canned meats within three years. In 1910 the imports amounted to 45,502,600 pounds; in 1911, to 55,404,800 pounds, and in 1912 to 76,883,400 pounds.

These figures appear to be eloquent testimony of the steadily increasing demand and of the ever-growing opportunity for larger American exports to this country, and support is given to this statement by the large number of letters lately received at the Paris consulate general from commission houses and agents asking to be put in touch with Chicago or other packers of canned meats not yet represented in France. All these firms state that they can furnish satisfactory references, and further information regarding their standing can easily be obtained through the usual channels.

RUSSIAN ABATTOIRS AND STORAGE.

Many cold storage plants are being erected in different parts of Russia. A well-known bakery in Moscow is constructing its own storage plant, and cold storage houses are to be constructed in the Okhotnyi Riad, the

chief food market of Moscow. The erection of cold storage plants is also being planned in many provincial towns, such as Nizhni Novgorod, Vladikavkaz, Kharkof and Archangel.

A joint stock company recently organized in St. Petersburg has purchased a large area of land in the Siennaya Ploshad district of that city and proposes to erect a building housing stores, banks, etc., including a large cold storage plant. The work is under the direction of the engineer who constructed the extensive cold storage plant of the Petersburg Store Company, Ltd.

A joint stock company is being organized in Novorossisk for the exploitation of abattoirs and cold storage plants and the exportation of meat products. A careful study has been made of the northern Caucasus and neighboring districts to determine the amount of livestock available for export, and investigations have been made of the chief foreign markets where perishable products from Novorossisk could be disposed of most profitably. Data concerning commercial and financial conditions have been collected, and a preliminary plan has been prepared as a basis for the organization of the new concern.

The capital stock of the new company is \$1,287,500, and plans are being made for the construction of abattoirs, cold storage plants, canneries and works for utilizing by-products, connecting railroads, loading platforms and other structures.

Favorable climatic conditions make this city a suitable port for the export trade, and if the project now under consideration for connecting Tsaritsin, on the Volga River, with Orenburg, on the Ural River, is carried out, all of eastern and southeastern Russia will be connected with this port. The further extension and equipment of the port which would follow would doubtless open a large field for Novorossisk, which is even now recognized as an important commercial center.

OMAHA LIVESTOCK MARKET.

(Continued from page 38.)

owing to the plentifulness of low-grade range steers. Grass heifers are quoted at \$6.50@7, and choice grass cows at \$6.20@6.60. Bulk of the fair to good butcher and beef stock is moving around \$5@5.60, and canners and cutters at \$3.25@5. Veal calves continue scarce and firm at \$6.25@9.75, and bulls, stags, etc., find a ready sale at \$5.25@6.50.

Although the run of hogs is of only moderate volume, the market continues to decline under the influence of bearish advices from Eastern points. Values are all of 35@40c. lower than a week ago, and there is a very weak undertone to the trade. Heavy loads sell at the top and inferior light and underweight loads at the bottom of the list, although the range of prices for fair to good loads of all weights continues comparatively narrow. A good many pigs are coming at this time and selling around \$5.25@7.25, or from 50c.@2 under fat grades. There were about 5,700 hogs here today and the market was 10@15c. lower. Tops brought \$7.80 as against \$8.20 last Tuesday, and the bulk of the trading was at \$7.55@7.70, as against \$7.95@8.15 one week ago.

Receipts of sheep and lambs keep up remarkably well, and the trend of prices is lower all along the line. Feeder buyers are still busy and take all of 70 per cent. of the offerings at prices 50@75c. under fat stock, but the liberal offerings are moving freely at the prices. There were nearly 60,000 head on sale today, and prices were weaker all around. Fat lambs are selling at \$6.40@7; yearlings, \$4.75@5.75; wethers, \$4@4.75, and ewes, \$3.85@4.40.

New York Section

Swift & Company's sales of fresh beef in New York City for the week ending October 18, 1913, averaged 11.36 cents per pound.

General Manager J. A. Howard of the S. & S. Company has been making an extended tour of the country, combining business with a little recreation.

Vice-President M. J. Sulzberger of the S. & S. Company returned this week on the Olympic from several weeks' trip abroad which combined business and rest.

The following is a report of the number of pounds of meat, fish, poultry and game seized and destroyed in the city of New York during the week ending October 18, 1913, by the New York City Department of Health: Meat.—Manhattan, 2,269 lbs.; Brooklyn, 18,625 lbs.; the Bronx, 475 lbs.; Queens, 195 lbs.; total, 21,564 lbs. Fish.—Manhattan, 5,258 lbs. Poultry and game.—Manhattan, 4,653 lbs.; Brooklyn, 21 lbs.; the Bronx, 30 lbs.; total, 4,704 lbs.

L. J. Callanan, the well-known Vesey street grocer, died on Thursday evening of last week after a brief illness. He was one of the unique characters of the provision trade in New York, and in public life as well. He began work in a small grocery store at 41 Vesey street when quite a lad, being paid 50 cents a week. He learned the grocery trade well and later acquired the business from his former employer. All of his working life was spent in the same store. Mr. Callanan was 78 years of age, and was active in municipal affairs. He was a member of the New York Mercantile Exchange, Produce Exchange, Chamber of Commerce and the Merchants' Association, in addition to several important religious bodies.

It was reported this week that the federal meat inspection authorities had given notice to many hotel and steamship supply houses, retail butchers and others that exemption certificates held by them under the meat inspection law would be withdrawn. These certificates permitted these houses to do an interstate trade, and without them each house or shop would either have to have government inspection or give up any trade across the state line. The reasons given for withdrawing the certificates were that some establishments were unsanitary, and that others were wholesale houses, and as such not entitled to exemption, which applies only to retailers and farmers.

OUT AMONG THE TRADE.

The old-established firm of Barry & Knutson, of No. 147 Amsterdam avenue, has been dissolved, Mr. C. O. Knutson retaining possession of the Amsterdam avenue store, while Mr. Barry has opened new quarters at 183d street and St. Nicholas avenue. Mr. Knutson is an old-timer on the avenue, and because he is a believer in quality has built up a fine business.

What appears at first sight to be a new face among the old-timers at the New York Butchers' Dressed Meat Company plant is only that of Jim Weston with his military mustache shaved off. It's nigh onto twenty years since Jim showed a smooth face, and now Jim looks like Jim's son, younger and more alert than ever—and that's going some, even for Jim Weston.

The old-established meat business of George Thomson at Sixth avenue and 56th street, probably one of the oldest in the city, has fallen into worthy hands. George C. Shaefer, Mr. Thomson's successor has been on the ground for many years, and is well qualified to continue running this business, which it took many years of hard work to build, numbering as it does among its customers some of the best and oldest families in New York.

The big new plate-glass front of the M. Michaels Company's store at No. 167 Columbus avenue has made a wonderful improvement to what was already a fine shop. With a splendid reputation for fine meats, and particularly fancy poultry, which is Mr. Michael's hobby. At any time of the year, regardless of price, he has the real thing in big, fat, yellow-leg roasting chickens and broilers which are so much in demand in his neighborhood.

After 14 years' experience in West Washington Market, catering to the wants of the inner man as waiters, Fred Kahlstrom and Sam Tannenbaum have branched out for themselves in the new J. J. Felin building at No. 16 Tenth avenue. Their new establishment is called the Market Restaurant. It is attractively fitted up, kept scrupulously clean, and the very best of everything is served. Marketmen are good judges of food, and that they are satisfied is to be easily seen by the crowded tables in the new restaurant.

Among the well-known pork packing and retail markets on upper Ninth avenue, none is better known than Geo. F. Liginger's provision house at No. 765 Ninth avenue. He has been in business in that neighborhood more years than the oldest resident can remember. His business, in his absence, is well looked after by his daughter, Miss Margaret Liginger, who for the past four years has acted as bookkeeper, cashier, private secretary and general office manager, and has proved herself very capable of filling this difficult position.

A butcher seldom remains many years in his first shop after having graduated from behind the bench, particularly if the shop happens to be a small one in a side street. Contrary to the usual custom, A. Ruoff, of West 39th street, opened his first shop at his present location, and has remained there with satisfactory results for the past seven-

teen years. And that is surely some record. Mr. Ruoff is what is known among butchers as an old-fashioned plugger. He works along, minds his own business, gives his customers exactly what they want; keeps a clean, up-to-date shop, and by the general appearance it looks as though he were booked for another seventeen years more.

Belmont Bloch, the son of Jacob Bloch, the big butcher of Ninth avenue and Forty-second street, was married last week at the Belvidere Hotel, Baltimore, Md., to Miss Lenore Cohen, a resident of Baltimore all her life, and who is considered one of the beauties of that beautiful Southern city, long famous for its charming women. Mr. Bloch, Jr., is known as one of the aristocrats of the butcher business. His appearance is that of a student or professional man, and yet he can hold his own with any of the old-timers behind the bench, as office manager, or in any other department of the business. After an extended wedding journey the young couple will live in New York.

Thirty years on Ninth avenue, within a radius of two blocks, is some record. And in those 30 years to have had but one employer is some more record to be proud of. That's John Hanselman's record, who was in the employ of Ed. Davis, the big hotel supply man of Chambers street, at their old branch store on Ninth avenue, between Thirty-sixth and Thirty-seventh streets, for 22 years out of the thirty. During the other eight years Mr. Hanselman has built up a fine business of his own at No. 486 Ninth avenue, a half block above where he started in as a boy to learn the business. His training under a strict employer has taught him the value of being on the job all day and every day. Almost every butcher knows Ed. Davis, and the name stands for good beef. So it has become second nature with Mr. Hanselman to handle the best he can buy. That's the principle reason why he has been successful.

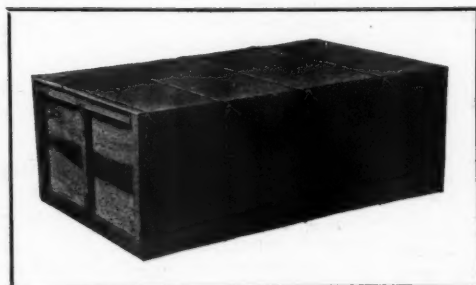
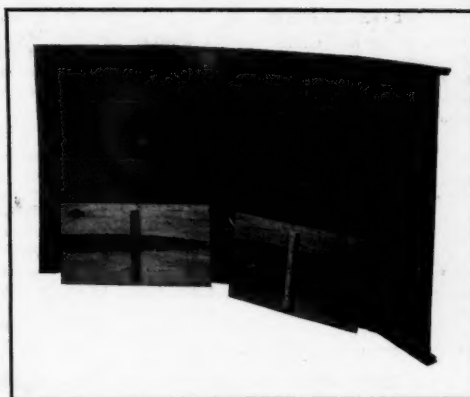
There is supposed to be nothing new under the sun, but something really and truly new would be a butcher's sign over the doorway of a big Nassau street store, reading: "Adolph Kahn, headquarters 723 Tenth avenue, wholesale meat dealer, down town restaurant and hotel supply company. We cater to the financial district particularly." Mr. Kahn has built up a big business by supplying an unusually large number of down town restaurants and hotels, and it would save him much time and labor to have a distributing point below City Hall. He has worked very hard to secure this business, which is extremely difficult to manage, as it necessitates long drives from his uptown store, early every morning and sometimes twice a day, in all sorts of weather. The surprising part of it is that Mr. Kahn has the appearance of a schoolboy, but the brains of a financier, as many old-timers have often tried to build up this kind of a business without success. He is without doubt one of the youngest men in the business, who by hard work and sheer grit has succeeded thus early in life.

The Packers' Problem is to

SAVE BOX WEIGHT

Our Solution—WIRE BOUND BOXES

Our customers are saving from 30-50% in weight over the old style nailed box and have proven by test that *you can save 15-20% on the Gross Weight of your shipments.*



WHAT WOULD BE YOUR SAVING PER YEAR?

Let us figure on your requirements

CHICAGO MILL AND LUMBER COMPANY

Wire Bound Dep't.

Chicago

BETTER HOURS FOR BUTCHERS.

Better hours for the employees of meat shops in New York is a matter which is being agitated just now, and it is significant that one of the foremost champions of this reform is a retail butcher who is himself a large employer. Jacob Bloch, the well-known Ninth avenue meat man, advocates this movement in the following letter to *The National Provisioner*:

New York, October 20, 1913.
Editor of *The National Provisioner*:

I am a retail butcher, in active business for thirty years in this city, and as such have seen with great satisfaction the many changes in the laws which have compelled

improvements for the benefit of the employer and the employee. I am alluding to the Sunday Closing Bill, the early closing of public markets, the ordinance which prevents displaying of meats in front of stores. I had the honor of being on the committee that championed these laws which meant so much to all concerned.

If you will permit me I would like to suggest another improvement which would benefit the real workers as much or more than those above mentioned. I mean the early and timely closing of all meat markets throughout the city, especially on Saturday nights, when all markets should be closed by ten P. M. and no later.

For this purpose I am anxious to enlist the help of your valuable paper. Imagine men having to work from five o'clock in the morning until one o'clock and in some cases after that hour the following morning, without any let-up. They are constantly on their feet on the main floor and in damp iceboxes and cellars all year around. Then, meats and poultry displayed for so many hours, especially during warm and damp weather, are not improved, but are really deteriorated.

There is a crying need for such a change, and while I suppose there will be some opposition, it will come from those who fear that their competitors will not abide by such change, but in common parlance "will try to put one over."

However, I am quite sure it can be accomplished, and that employer, employee and the public in general would be benefited thereby. I am equally sure that if you will spread this letter in your columns, you will be surprised at the support and praise you will receive. Very respectfully yours,

JACOB BLOCH.

valuable trade information may be found every week on the "Practical Points for the Trade" page. Do you make it a habit to study this page?

MCCAULEY GETS REMEMBRANCES.

Superintendent W. L. McCauley of the United Dressed Beef Company, who left New York this week to become the president of a bank in Texas, was given several testimonials of friendship from trade associates before he departed. At luncheon on Tuesday he was surprised by the presentation of a handsome gold watch at the hands of President Walter Blumenthal of the United Dressed Beef Company, the gift of his associates in the company. On Wednesday Mr. McCauley was tendered a luncheon at the Hotel Astor by the directors of the Manhattan Sanitary Inspection Association, of which he has been secretary since its organization. At this luncheon he was presented with an elaborate chest or silver in behalf of the association, President W. H. Noyes making the presentation speech. Mr. McCauley has been one of the best-liked men in the trade during his long residence in New York, and it is safe to say that he leaves not a single ill-wisher behind him.

Packinghouse, provision, refrigeration and other machinery and equipment at second-hand. Buy it or sell it through *The National Provisioner's* "Wanted and For Sale" department.

== FREE == Christmas Dinners

FOR
300,000
POOR
PEOPLE

Will be
supplied by

The
Salvation Army
Throughout the
United States

Will you help by
sending a
donation, no
matter how small

TO COMMANDER
MISS BOOTH

118 W. 14th St., New York City
West's Dept. Comm. Edill, 108 N. Dearborn St. Chicago



Grandma Gets One

J-M INSULATING MATERIALS

J-M Pure Cork Sheets J-M Granulated
J-M Impregnated Cork Cork
Boards J-M Hair Felt
J-M Mineral Wool J-M Weatherite Paper
Write us as to your requirements.

H. W. JOHNS-MANVILLE CO.
NEW YORK AND EVERY LARGE CITY

NEW YORK MARKET PRICES

LIVE CATTLE.

Good to choice native steers.....	\$7.65@8.85
Poor to fair native steers.....	5.25@7.55
Oxen and stags.....	5.00@7.50
Bulls and dry cows.....	3.00@6.75
Good to choice native steers one year ago..	8.00@9.50

LIVE CALVES.

Live veal, common to prime, per 100 lbs.	9.50@12.75
Live calves, fed, per 100 lbs.....	6.00@ 7.00
Live calves, grassers.....	—@—
Live veal calves, Western, per 100 lbs....	—@—

LIVE SHEEP AND LAMBS.

Live lambs, good to prime.....	7.25@ 7.30
Live lambs, culls.....	5.00@ 5.50
Live sheep, ewes.....	4.00@ 4.50
Live sheep, culls, per 100 lbs.....	@ 3.00

LIVE HOGS.

Hogs, heavy.....	8.65@ 8.70
Hogs, medium.....	@ 8.80
Hogs, 140 lbs.....	8.95@ 9.00
Pigs.....	@ 8.85
Rough.....	7.35@ 8.00

DRESSED BEEF.

CITY DRESSED.

Choice native heavy.....	13½@14
Choice, native light.....	13½@13½
Native, common to fair.....	12 @13

WESTERN DRESSED BEEF.

Choice native heavy.....	13½@14
Choice native light.....	13½@14
Native, common to fair.....	12½@13
Choice Western, heavy.....	@12½
Choice Western, light.....	11 @12
Common to fair Texas.....	10 @11
Good to choice heifers.....	12½@13
Common to fair heifers.....	11 @12
Choice cows.....	10 @11
Common to fair cows.....	@10½
Fleshy Bologna bulls.....	10 @10½

BEEF CUTS.

	Western.	City.
No. 1 ribs.....	15½@16½	16½@17
No. 2 ribs.....	13½@14	15 @16
No. 3 ribs.....	10½@11½	14 @15
No. 1 loins.....	15½@16½	17 @18
No. 2 loins.....	13½@14	15 @17
No. 3 loins.....	10½@11½	13 @15
No. 1 hinds and ribs.....	15 @16	15 @16
No. 2 hinds and ribs.....	14 @15	14 @15
No. 3 hinds and ribs.....	13 @14	11 @12
No. 1 rounds.....	@12½	12 @13
No. 2 rounds.....	@11½	11½@12
No. 3 rounds.....	@10½	10½@11½
No. 1 chucks.....	11½@12	@13
No. 2 chucks.....	10 @11	@12½
No. 3 chucks.....	9 @10	@12

DRESSED CALVES.

Veals, city dressed, good to prime, per lb.	@19
Veals, county dressed, per lb.....	@18
Western calves, choice.....	@15
Western calves, fair to good.....	12 @14
Western calves, common.....	10 @11
Grassers and buttermilks.....	@10

DRESSED HOGS.

Hogs, heavy.....	@11½
Hogs, 180 lbs.....	@11½
Hogs, 160 lbs.....	@12
Hogs, 140 lbs.....	@12½
Pigs.....	@12½

DRESSED SHEEP AND LAMBS.

Spring lambs, choice, per lb.....	@14½
Lambs, good.....	@13
Lambs, medium to good.....	@11½
Sheep, choice.....	@10
Sheep, medium to good.....	@ 9
Sheep, culls.....	@ 7½

PROVISIONS.

(Jobbing Trade.)

Smoked hams, 10 lbs. avg.....	@17
Smoked hams, 12 to 14 lbs. avg.....	@16½
Smoked hams, 14 to 16 lbs. avg.....	@16½
Smoked picnic, light.....	@11½
Smoked picnic, heavy.....	@11½
Smoked shoulders.....	@11½

Smoked bacon, boneless.....	@18
Smoked bacon (rib in).....	@16½
Dried beef sets.....	@28
Smoked beef tongue, per lb.....	@19
Pickled bellies, heavy.....	@15

FRESH PORK CUTS.

Fresh pork loins, city.....	17 @20
Fresh pork loins, Western.....	14 @18
Fresh pork tenderloins.....	@32
Frozen pork tenderloins.....	@31
Shoulders, city.....	14 @14½
Shoulders, Western.....	@13½
Butts, regular.....	15 @15½
Butts, boneless.....	18 @19
Fresh hams, city.....	16 @17
Fresh hams, Western.....	15 @16
Fresh picnic hams.....	12½@13

BONES, HOOFS AND HORNS.

Round shin bones, avg. 48 to 50 lbs.	per 100 pcs.....	95.00@100.00
Flat shin bones, avg. 40 to 45 lbs. per	100 pcs.....	80.00@ 85.00
Black hoofs, per ton.....		40.00@ 45.00
Striped hoofs, per ton.....		50.00@ 55.00
White hoofs, per ton.....		95.00@ 97.50
Thigh bones, avg. 85 to 90 lbs. per	100 pcs.....	90.00@100.00
Horns, avg. 7½ oz. and over.....		280.00@285.00

BUTCHERS' SUNDRIES.

Fresh steer tongues.....	@14½c. a pound
Fresh cow tongues.....	12½@13c. a pound
Calves' heads, scalded.....	45 @50c. a piece
Sweetbreads, veal.....	45 @90c. a pair
Sweetbreads, beef.....	25 @30c. a pound
Calves' livers.....	@25c. a pound
Beef kidneys.....	@15c. a piece
Mutton kidneys.....	@ 3c. a piece
Livers, beef.....	8½@10c. a pound
Oxtails.....	8 @ 9c. a piece
Hearts, beef.....	@ 6c. a pound
Rolls, beef.....	@27c. a pound
Tenderloin, beef, Western.....	@25c. a pound
Lambs' fries.....	@ 8c. a pair
Extra lean pork trimmings.....	15½@16c. a pound
Blade meat.....	@12½c. a pound

BUTCHERS' FAT.

Ordinary shop fat.....	@ 3½
Suet, fresh and heavy.....	@ 6½
Shop bones, per cwt.....	25 @1.00

SAUSAGE CASINGS.

Sheep, imp., wide, per bundle.....	@80
Sheep, imp., medium, per bundle.....	@60
Sheep, imp., per bundle.....	@50
Sheep, domestic, wide, per bundle.....	@70
Sheep, domestic, medium, per bundle.....	@50
Sheep, domestic, narrow med., per bundle.	@25
Hog, American, free of salt, tca. or bbls., per lb., f. o. a. New York.....	@70
Hog, extra narrow selected, per lb.....	@70
Hog, middles.....	@10
Beef rounds, domestic, per set, f. o. b. Chi- cago	@18
Beef rounds, export, per set, f. o. b. New York.....	@24
Beef bungs, piece, f. o. b. New York.....	@20
Beef middles, per set, f. o. b. New York...	@75
Beef middles, per set, f. o. b. Chicago....	@72
Beef weasands, per 1,000, No. 1s.....	@ 7½
Beef weasands, per 1,000, No. 2s.....	@ 4

SPICES.

	Whole.	Ground.
Pepper, Sing., white.....	20½	22½
Pepper, Sing., black.....	12	14
Pepper, Penang, white.....	17½	18½
Pepper, red Zanzibar.....	12	15
Allspice.....	5½	7½
Cinnamon.....	16	20
Coriander.....	7	9
Cloves.....	20	23
Ginger.....	8½	11½
Mace.....	65	70

SALTPETRE.

Crude.....	4½@ 5
Refined—Granulated.....	@ 5½
Crystals.....	5½@ 7
Powdered.....	@ 6

GREEN CALFSKINS.

No. 1 skins.....	@ .27
No. 2 skins.....	@ .26
No. 3 skins.....	@ .15
Branded skins.....	@ .19
Ticky skins.....	@ .19
No. 1 B. M. skins.....	@ .25
No. 2 B. M. skins.....	@ .23
No. 1, 12½-14.....	@2.05
No. 2, 12½-14.....	@2.70
No. 1 B. M., 12½-14.....	@2.00
No. 2 B. M., 12½-14.....	@2.35
No. 1 kips, 14-18.....	@3.00
No. 2 kips, 14-18.....	@2.85
No. 1 B. M. kips.....	@2.35
No. 2 B. M. kips.....	@2.25
No. 1, heavy kips, 18 and over.....	@3.85
No. 2, heavy kips, 18 and over.....	@3.00
Branded kips.....	@2.05
Heavy branded kips.....	@2.40
Ticky kips.....	@2.30
Heavy ticky kips.....	@2.05

DRESSED POULTRY.

FRESH KILLED.

Fowl—Dry packed, 12 to box—	
Western boxes, 48 to 55 lbs. to doz., dry-picked, fancy	@18½
Western boxes, 36 to 42 lbs. to doz., dry-picked	@16
Fowl—Iced, bbls.—	
Western, dry-picked, 4 to 5 lbs.	16½@18½
Southern and S. Western, dry-picked	14 @16½
Other Poultry—	
Old Cocks, per lb.	@13
Squabs, prime, white, 10 lbs. to doz., per doz.	@4.25

LIVE POULTRY.

Chickens, fancy, nearby, per lb.....	@17
Chickens, Leghorns, cockerels.....	@16½
Chickens, Western, per lb.....	@17
Chickens, Southern, per lb.....	@17
Fowls, via freight, choice.....	@18
Fowls, via express.....	@18
Old Roosters, per lb.....	@12½
Turkeys, hens and toms, mixed.....	@18
Ducks, Long Island, per lb., spring.....	@22
Ducks, West and So., per lb.....	@17
Geese, per lb., Western.....	@15
Guineas, per pair.....	@65
Pigeons, per pair.....	@20

BUTTER.

Creamery, Extras.....	31½@32
Creamery, Firsts.....	28 @30½
Process, Extras.....	26½@27½
Process, Firsts.....	25 @26

EGGS.

Fresh gathered, extras.....	34 @36
Fresh gathered, extra firsts.....	31 @33
Fresh gathered, firsts.....	29 @30
Fresh gathered, seconds.....	26 @28
Fresh gathered, dirties, No. 1.....	23 @23½
Fresh gathered, dirties, No. 2 and poorer..	18 @22
Fresh gathered, checks, good to choice dry.	20 @21

FERTILIZER MARKETS.

BASIS, NEW YORK DELIVERY.

Bone meal, steamed, per ton.....	20.00	@ 20.50
Bone meal, raw, per ton.....	28.00	@ 29.00
Hoof meal, per unit, Chicago.....	2.75	@ 2.80
Dried blood, West, high grade, fine, f. o. b. Chicago, prompt.....	2.95	@ 2.97½
Nitrate of soda—spot.....	2.35	@ 2.40
Bone black, discard, sugar house del. New York.....	24.00	@ 25.00
Dried tankage, N. Y., 11 to 12 per cent, ammonia, f. o. b. New York	2.85@2.90 and 10c.	
Tankage, 11 and 15 p. c., f. o. b. Chicago, prompt.....	2.80@2.85 and 10c.	
Garbage tankage, f. o. b. New York.	7.00	@ 7.50
Flach scrap, dried, 11 p. c. ammonia and 15 p. c. bone phosphate, de- livered, New York (nominal).....	3.45	and 10c.
Foreign fish guano, testing 13½% ammonia and about 10% P. Phos- Lime, c. I. f. Charleston and New- port News.....	3.00	and 10c.
Wet, acidulated, 7 p. c. ammonia per ton, f. o. b. factory (35c. per unit available phos. acid).....	2.60	@ 2.65
Sulphate ammonia gas, for shipment, per 100 lbs., guar., 25%.....	3.10	@ 3.15
Sulphate ammonia gas, per 100 lbs., spot, guar., 25%.....	3.10	@ 3.15
So. Carolina phosphate rock, ground, per 2,000 lbs., f. o. b. Charleston.	6.50	@ 7.70
So. Carolina phosphate rock, undried, f. o. b. Ashley River, per 2,240 lbs.	3.50	@ 3.75
The same, dried.....	3.75	@ 4.00

